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ABSTRACT

The document contains 16 papers on program implementation in the career development of the handicapped, and is one of three volumes of selected papers presented at a November, 1981, international conference on the career development of handicapped individuals. Papers have the following titles and authors: "A Career Education Materials Development Process for Elementary Resource Rooms" (J. Baker); "How to Survive the Budget Cuts: Interagency Cooperation" (M. Barbieri and J. Luna); "A Systematic Approach to Comprehensive Community Based Education for the Handicapped" (A. Beason): "School Based Work Activity Center: A Transition from School to Sheltered Employment" (W. Begun et al.); "The Organizational Structure of Alternative Vocational Programming for the Handicapped in East Baton Rouge Parish Schools" (J. Brown et al.): "Career Education in the Arts for the Mentally and Developmentally Handicapped" (D. Clancy and P. Klugerman): "Implementing a Comprehensive Career and Vocational Education Program for Handicapped Students" (B. D'Alonzo et al.): "Curriculum and Continuum: The Two "C's" Leading to Gainful Employment of the Handicapped" (B. Day); "Independent Living: The Concept, The Movement, and Program Models" (L. Frieden); "Project Interact: An Interagency Linkage System Between Education and Rehabilitation" (J. Gutterman and J. Todd); "Access to Vocational Education: Development and Use of a Planning System" (J. Hughes and E. Rice); "Slice of Life" by T. Makowski (a description of a sequential vocational development program for a secondary special education population); "Providing Regionalized Vocational Programming and Services to Handicapped Youth" (J. Mucci and R. Linari); "Saleable Skills Training Program" (M. Otto); "El Centro College Vocational Rehabilitation Program: A Non-Traditional Approach to Adult Career Education" (L. Skibell and J. Shoop); "Implementation of a Rural Model of Vocational Service Delivery for Handicapped Adolescents: A Developmental Process" (V. Werbel and I. Ross). (DB)

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SELECTED PROCEEDINGS FROM THE INTERNATIONAL CONFERENCE ON THE CAREER DEVELOPMENT OF HANDICAPPED INDIVIDUALS: PROGRAM IMPLEMENTATION

VOLUME 2

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Presented by The Division on Career Development
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PREFACE

Career education was first proclaimed as a major educational reform in 1971 when the then U.S. Commissioner of Education, Sidney P. Marland, Jr., introduced the concept to a group of secondary school principals at a national education convention in Houston, Texas. It wasn't long before special educators who were interested in coordinated efforts for exceptional individuals began to apply the concepts of career education to the teaching and training process.

In 1973 The Council for Exceptional Children jointly sponsored with the American Vocational Association a National Topical Conference on Career Education for Exceptional Children and Youth in New Orleans. The conference attracted over a thousand participants several of whom began to plan for the development of a formal organization that would promote career efforts across the country. This organization, The Division on Career Development, The Council for Exceptional Children, became a reality in 1976.

The career movement received another boost when The Council for Exceptional Children sponsored a second National Conference on Career Education for Exceptional Individuals in St. Louis, Missouri, February, 1979. The conference included two days of Training Institutes in addition to three days of presentations, workshops, and keynote speakers. The selected proceedings from the conference are available in: Career Futures for Exceptional Individuals, Charles J. Kokaska, Editor. Reston, Virginia: The Council for Exceptional Children, 1979.

This second national conference provided Division members with the opportunity to increase membership in the organization and expand their efforts toward providing career/vocational programs from the elementary school years to adult independent living situations. By this time, the Division had achieved an adequate financial base and long term planning to publish a newsletter and journal, Career Development for Exceptional Individuals, which would further explore career concepts, research, and programs.

The papers in these three volumes are drawn from the proceedings of the third conference in less than ten years, The International Conference on the Career Development of Handicapped Individuals, Dallas, Texas, November 19-21, 1981. The conference was planned and sponsored by the Division on Career Development, the fledgling group of concerned professionals that began to talk about an organization less than eight years ago. The intent of this third conference was to highlight efforts that were in operation rather than "on the drawing board." This goal was achieved.

The conference plan included 82 sessions which were grouped under the following themes: adult career education, career and vocational assessment, comprehensive career education programming, consumer group involvement, daily living and personal social skills, research, and vocational preparation for gainful employment. Papers which were submitted by the participants were divided for the purpose of publication into three dominant topics: assessment (Volume 1), program implementation (Volume 2), and research (Volume 3).

The Executive Committee of the Division on Career Development, 1981-82, wishes to thank all of the professionals for their work in making the International Conference another successful endeavor. The Division has grown over the past few years because these professionals have seen the need for a career focus to the total life of exceptional individuals and developed the means to facilitate changes in our ideas and programs. We hope that these three volumes of Selected Proceedings will contribute further to efforts on behalf of the career futures of handicapped individuals.

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A Career Education Materials Development
Process for Elementary Resource Rooms

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Running head: Materials Development for Elementary Resource Rooms

Abstract

This paper provides an overview of the project, "Career Education Infusion Model for Elementary Resource Rooms" as developed by the Career Alternatives Program staff at the Special School District of St. Louis County. This project involved the development, adaptation and use of career education materials in local elementary school resource rooms serving behavior disordered, learning disabled and educable mentally retarded students. Information from the project that may be helpful to others wishing to develop or adapt career education materials is included.

A Career Education Materials Development Process for Elementary Resource Rooms

Since 1971 career education has become a major thrust in the education process for all students. As a result of the movement toward mainstreaming and public law 91-142 directing that students be served in the least restrictive environment, millions of students are being served by itinerant special education teachers and resource room teachers. In the Special School District of St. Louis County, large numbers of children in segregated special classes had been receiving career education programming. With the move into the mainstream many of them lost access to such programming due to a variety of real or imagined constraints on their teachers.

The staff and programming efforts of the Career Alternatives Program (CAP) of the Special School District of St. Louis County of necessity reflected the changes. Initially the CAP Staff placed emphasis on special programming and curriculum development for students in special schools. As the student population shifted into local schools, a need for a different approach to career education programming for more than 9000 special students in local schools became evident. "The Career Education Infusion Model for Elementary Resource Rooms," evolved as a means to more effectively serve elementary mainstreamed students.

This state funded project reflected the district's philosophy of using career education to make school work more relevant. Career education in Special District is considered to be a life-long process which helps individuals acquire and apply skills that are required for adult living. These skills fall into three categories: daily living skills, personal social skills, and occupational guidance and preparation skills (Brolin, 1978).

The process of incorporating career education concepts into existing or new curriculum is known as infusion. The goals of infused career education should satisfy the goals of the subject area as well as those on students' Individualized Education Plans (IEP).

Before implementing the "Career Education Infusion Model for Elementary Resource Rooms," the district's career education resource teachers heard many reasons given why career education couldn't work in resource rooms or for students served by itinerants:

> I don't have time.
> It's not in my IEP goals.
> I don't have the right training.
> I don't have career education materials.
> The career education materials I have don't work.
> etc. - etc. - etc.

Infusion of career education into everyday teaching activities in resource rooms was perceived by the CAP Staff as the best way to overcome such roadblocks to the implementation of career education in resource rooms. By infusing career education concepts into regular school activities, the staff felt that learning could be made relevant and that students would be more motivated to learn. As a result they would be more likely to achieve the goals on their Individualized Education Plans.

Project Description

A major problem confronting the CAP staff was how to entice resource room teachers to infuse career education into their teaching. The staff decided to involve resource room teachers in using a career education infusion approach by hiring them to develop and adapt materials which would help students reach their IEP goals as well as increase their level of career awareness.

To that end a grant proposal was submitted to and accepted by the Missouri Department of Elementary and Secondary Education, Career Education Office. The grant provided money to pay for materials to be adapted and to pay an hourly wage to the materials developers. The goal of the proposal was to demonstrate that use of career education materials in resource rooms did not hinder the achievement of IEP goals (academic progress), and would expand students' career knowledge. Eight pilot rooms were selected to use and evaluate the materials and activities developed by a group of approximately twenty professional staff. The eight rooms were selected to provide a diverse geographical and social-economic spread. The teachers served learning disabled, behavior disordered and educable mentally retarded students up through the sixth grade.

Students in pilot rooms were pre and post-tested using a career awareness inventory developed by the CAP staff. Academic progress was determined by achievement on various standarized achievement tests routinely given by the local districts.

The ultimate but unwritten goal of the project was to expand career education into all the resource rooms in Special District by developing useful attractive materials that could be easily reproduced and disseminated to each resource room teacher.

Results

During the two years of the project, over 300 materials and activities were developed or adapted. Folder games, puzzles, worksheets and learning activity packets were developed either as independent activities or as adaptations to supplement commercial materials. They ranged in difficulty from activitites for preschool children to those for upper intermediate ages. The eight pilot resource room teachers evaluated the materials according to the following criteria: times used, student reaction, durability, need for teacher assistance, and value of the activity. Results of the evaluations indicated that a variety of materials were successful. Different teachers using the same material often had quite different evaluations of it, depending on their teaching styles and the students taught. The folder games and learning activity packets were very popular as were many single page activities.

The findings were not statistically significant because of uncontrolled variables. The career awareness instrument yielded interesting information about individual student's knowledge but did not provide a clear indication of knowledge gain across the tested group.

The findings that staff relied upon to evaluate the project were the amount of increased interest in infusing career education into elementary resource rooms and the evaluations of the materials by the teachers who used them.

A sample packet of activities was produced for wide dissemination around the district to inform supervisors and resource room teachers not involved in the project about the materials that were developed.

Supervisors were enthusiastic about the packets and encouraged the CAP staff to develop a similar project for secondary mainstreamed students. Requests for additional materials came from many teachers.

Copies of all the materials developed during the project are on checkout from the state career education resource center. State department officials report that the materials have been constantly checked out. Because of the popularity and quality of the materials developed, a new project to develop career education materials for secondary mainstreamed students has been funded.

Considering teacher input, the CAP staff has selected activities to incorporate into three activity books, the Back to Basics with Career Education series, that will be disseminated to all the elementary resource room teachers in the district.

Each book will include 40 to 50 pages of activities. The first book will be on language arts, the second math, and the third social studies and personal social skills.

Since statistical findings were not found to be valid because of the number of uncontrolled variables, the staff had to evaluate results by other means. Based upon reaction of district teachers, supervisors, and state department officials the infusion project was a great success.

Materials Development and Adaptation Process

One of the most valuable results of the infusion project was the knowledge gained about the materials development and adaptation process. As the staff became more experienced and organized, the process became easier and the quality of the materials improved.

The following observations about materials development and adaptation may be helpful to anyone who is involved in developing materials for dissemination to elementary teachers.

1. Provide formal or informal inservice training on how to make materials that are easily duplicated. The following guidelines will help teachers make materials that are easy to duplicate.

A. Make black line masters on 8½" by 11" paper. Ditto masters wear out. It is more time efficient to make black line masters that can be thermal copied on a master and then run. Keep the original to make new masters as needed.

B. Require all work to be done with black ink. Color can be added after the material has been run off or printed. The type of black ink used may depend on your copy machine. Fine line black felt tip pens work quite well when printing is done on an offset lithography press but do not work to make thermal copy masters. Pencil works well for thermal copies but often does not give a good clear image when copied using a lithography process.

C. Provide a standard format in which the activities are to be developed. One inch margins on 8½" by 11" paper were found to be a good format for our purposes. It may be advisable to specify a particular place for the student's name, date, etc. Caution: Do not assume people will leave adequate margins! Several materials had to be redone because the printing machine cut off things written or drawn too close to the edges. Your format should also include identification marks if desired. We requested "CAP," the year, and the developer's initials in the lower right hand corner (within the margins).

D. Request samples of handwritten and hand printed materials from the teachers before they produce activities. Depending on the quality of the hand printed work, you may request that the materials be typed with larger-than-pica-type. Activities hand lettered by a skilled printer are often much more attractive and appealing to students. Since our materials were designed for students with learning difficulties, we discouraged highly stylized manuscript printing. Unless developing a cursive handwriting activity, teachers were encouraged to print or type.

E. Discuss copyright regulations. (See Appendix 1)

F. Provide standard sized paper either 8½" by 11" or 8½" by 14". Teachers who developed activities on 9" by 12" graph paper or 9" by 12" oak tag found that the activity would not duplicate on standard 8½" by 11" paper.

G. Demonstrate paste up methods that will work with the duplicator machine available in your facitily. "Magic" brand tape worked well for us to tape line drawings onto activity pages. "White Out" and other correcting fluids can be used to cover mistakes for litho-printing but often show up on Xerox copy. With the machine we used, we found that "White Out" did show up. Caution teachers about using the right kind of correcting fluid. Some fluids will cover water based felt tip marker but won't cover over Xerox mistakes without turning gray or black. If in doubt, have the teacher experiment on an unimportant piece of paper before ruining the final copy of an activity. If a waxer is available, paste up of illustrations is much simpler. We did fine without one.

H. Proof everything several times! Mistakes in grammar and spelling are deadly. Request that teachers proof carefully all work before turning in finished activities. You will also have to carefully check each activity yourself. Even super teachers have off times. You may have to redo some activities done by the teachers. A mistake not caught can mean doing over a whole sheet. Mistakes can cause problems in the classroom for students.

I. Require answer keys to all activities developed. Check the activity against the answer key to be sure both are correct. We had some very frustrated students trying to find a non-existent answer on one activity. Careful checking several times will eliminate most mistakes.

J. Try out the materials with a student to see if they work. It is a good idea for teachers to use the activities they develop with their own students to determine usefulness and appropriateness. If the activities don't work, there is no use duplicating them. They may need further adaptation such as more complete instructions, lower reading level (or higher), or more attractive illustrations.

2. Provide inservice on methods of adapting materials. Depending on students' learning problems, adaptation methods will vary greatly. The following are methods of adaptation that you may wish to cover in an inservice.

A. Simplify the reading level. Keep content age appropriate but shorten the sentences. Use simple sentence construction and use words at or below the reading level for which you are trying to prepare materials. (Career vocabulary words may be too technical for reading comprehension and can be covered prior to the actual reading.) It is a good idea to test your writing with one of the readability formulas.

B. Simplify the page format. Leave more space between items. Reduce the number of stimuli on the page. Be sure that any illustrations work with the content. Be sure that no illustrations overlap into the written content. Use a larger than standard type face.

C. Simplify directions. Some commercially available activities are excellent, except that they have complex directions. The directions may be taped. Illustration of the direction may be used; e.g., Circle the best one. The reading level of the instructions may be simplified. You may wish to leave the directions off entirely and have the teacher demonstrate or tell the students how to do the activity.

D. Add or reduce the amount of color. Some materials have too much color making it difficult for many special needs students to focus on the context. They may become easily distracted. A little color on an illustration often makes a routine page look super. Color is generally not used on originals when developing or adapting materials that you want to duplicate inexpensively. The color can be added later if necessary.

E. Change the focus of interest in the material. An activity should focus on areas of interest to the target students. Simplified reading level but high school interest level will not be effective with elementary students.

F. Take an activity that works and make a series of activities that use the same format, but that do not necessarily focus on the same subject area.

G. Add a simple line drawing to a page full of words. Select the illustration both to enhance the concepts on the page and to motivate the reader.

H. Make materials free of sex, race, and handicap bias. Change sexist language and illustrations. Illustrations should show an equal distribution of sexes in both traditional and non-traditional roles as well as in family and social roles. (Women on Words and Images). Include illustrations of minority group workers and handicapped/disabled workers. It's preferable to show both sexes in a job role than to constantly show role reversals.

I. Change board games to easily stored, portable and easily duplicated folder games. A folder game consists of two sheets of 8½" by 11" paper with the "game board" printed half on each sheet. These are then glued inside the folder. A pocket or an envelope containing directions, playing pieces, cards, etc. can be attached to the folder. It is helpful to laminate the finished product. Commercial games often have motivating style but not the content you desire, so they must be adapted to meet your needs. You may wish to develop a "Checkers" type game for reading or a "Monopoly" type game covering jobs and pay. Survival word "Bingo" is one of our most popular activities.

J. Develop unit activities in such a way that they have a common thread but yet any one of them could be pulled out individually and be used effectively. In developing materials to accompany filmstrip sets, it is important to keep in mind that many people who will not have access to the filmstrips may be able to use or benefit from the adapted materials.

K. Adapt existing materials such as posters to provide career education stimuli. "Passive stimuli" affect the students' environment. You may wish to use the opaque projector to blow up or enlarge a worker line drawing for a poster. If you make a transparency of a small line drawing you can make larger than lifesize posters. Passive stimuli may be as simple as showing a worker for each letter of the alphabet.

3. Carefully coordinate the teachers working to adapt or develop materials.

A. Carefully select teachers for the adaptation process. Not all good teachers are creative at developing or adapting materials. We found that selection on the basis of teaching skills was not effective. In the application process, test teachers for creative ideas by giving them an activity and asking for ideas on how to adapt it and for ideas for new materials or activities generated from the original activity. As mentioned before,skill in making attractive worksheets is most useful. Good lettering, some layout skills, spacing ability and some artistic skill should be investigated when selecting workers.

B. Coordinate and blend talents of various workers in the adaptation process. In working with twenty teachers at a time in the resource room project, we found that some were not as skilled in developing content but were very artistic, while others were great at developing content but were not particularly artistic.

C. Be aware of what everyone is working on. Coordinate the activities so that teachers are not developing too many activities of one kind and are not adapting the same material.

D. Provide a place for teachers to develop the materials. We required teachers to do most of their work in a teacher resource center where a large variety of line drawings of workers and other materials and supplies were available. Some teachers finished the work at home. Results were spotty. We felt that the best results occured when people worked together in a relaxed but business like atmosphere. Ideas were generated among teachers and coordination was much easier.

E. Develop a numbering or filing system for the activities. When a teacher requests more work sheets for an activity, you can easily find the original and extra copies.

F. Give credit to the material developers. Their names or initials should be included somewhere on the work they completed, or listed at the beginning of a packet.

Enjoy the process. Sometimes it's frustrating. Usually it is fun but most of all it is rewarding to see the materials being used with special needs students to increase their career awareness while helping to improve their academic skills.

Conclusion

The process of utilizing resource room teachers to develop and adapt materials to infuse into their programs resulted in increased career education activity in resource rooms in Special School District of St. Louis County. This process may also be used effectively with other groups of teachers.

References

Brolin, D. Life centered career education: A competency based approach. Reston, VA.: Council for Exceptional Children, 1978.

Women on Words and Images, Guidelines for sex-fair vocational education materials. Princeton, New Jersey: reprinted by the Missouri Department of Elementary and Secondary Education.

(Appendix A)

Before adapting and disseminating activities based on commercial materials, check the copyright laws and your district policy and guidelines. Adapting a protected work may involve legal liability for copyright infringement. Copyright laws are very complex and have many exceptions and qualifications. Adapters should consult with someone experienced in the field or obtain permission from the copyright holder of the materials to be adapted. Permission should be requested through a letter addressed to the holder. The letter should contain information about the project and how the adapter plans to alter and use the materials. Include a permission form for the copyright holder to return. A letter to request permission should contain the following:

1. Adapter's name and identification
2. Date, title, and name of the author
3. Request of permission to adapt
4. Description of what will be adapted
5. How the materials will be adapted, including purpose and objective
6. Extent adaptation will be used and circulated (age, number of people in intended audience, and duration of use)
7. Request of credit line to be used
8. Permission form for return of adapter

How To Survive the Budget Cuts: Interagency Cooperation

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How to Survive the Budget Cuts: Interagency Cooperation

In years past, overlapping in program services offered through special education, vocational education, vocational rehabilitation, and other community agencies was an accepted practice and was within each ageny's funding power. However, in order for agencies to live within today's budgetary limitations and to continue to prepare persons who are handicapped for meaningful, appropriate vocations, collaboration and cooperation must replace overlapping services and turfdom issues.

Interagency collaboration is not a new idea - it has been an option discussed for quite a few years. A few service providers have entered into cooperative agreements wholeheartedly, others have dabbled with the process, and many have discussed collaboration as an interesting, yet unpractically complicated venture. However, now that funding for agencies is questionable but mandates for service are clear, much more interest in sharing personnel, facilities, and burden of service is apparent.

Consumers of our services are demanding more cost effective and accountable programs that are easily accessible and time efficient. Service providers can no longer try to be all encompassing, self-contained answers to the needs of the handicapped. Nor can we delve so heavily into the referral business - referring consumers to several different community providers, all requiring their own volumes of red tape and eligibility obstacle courses.

The age of "Survival of the Most Creative and Flexible" has definitely arrived in our field. We must put away our turfdom battles and isolationist attitudes and combine our areas of expertise into a cooperative, continuum of service. The alternatives in many cases are to cut services (and hence personnel), reduce quality of service, or cease functioning.

The purpose of this presentation is to give examples of programs that are involved in cooperative efforts and while doing so, show the differences of these programs. There are as many different approaches to collaboration as there are service providers. Exploring existing agreements for the purpose of adapting those to your situation or to stimulate new ideas unique to your program is a common sense approach to entering into a collaborative agreement. We will also discuss the joint venture in which we are involved to give some first hand insight into initial contract considerations, changes made over the years to meet changing needs of the agencies and the consumers, and make suggestions for organizations just beginning this procedure.

Exemplary Models

The Research and Training Center in Mental Retardation at Texas Tech University has a publication, Cooperative Occupational Preparation of the Handicapped: Exemplary Models, which examines ten successful cooperative programs. We have selected four of those programs for examples of different types and involvements of collaboration for delivery of services (Ashby & Bensburg, 1981).

Salt Lake City, Utah

The Columbus Community Center (CCC) in Salt Lake City, Utah, is a cooperative effort between the Salt Lake City Board of Education, the Utah Division of Rehabilitation Services, and the Utah State Board of Vocational Education. This education and rehabilitation facility serves the handicapped and disadvantaged population of the area and has received accreditation by the Commission on Accreditation of Rehabilitation Facilities.

Program includes: work activity
sheltered employment
vocational training
job placement and follow-up
therapeutic recreation
fuctional academics

Population:

The Center serves clients ages 16-23 with an average daily attendance of 210 and a yearly total of 420 persons receiving service.

A breakdown of their population by percentage of handicapping classifications is:

mentally retarded - 95%
hearing impaired - 5%
speech impaired - 15%
visually impaired - 7%
emotionally disturbed - 7%
orthopedically impaired - 16%

Approximately 45% of the CCC population is classified as multiply handicapped.

Funding:

A partial breakdown of the $855,000 budget for 1979:

1. Federal: CETA - $116,000
   Developmental Disabilities - $13,000
2. State: Division of Rehabilitation Services - $150,000
   Vocational Education - $85,000
3. Local: School District Special Ed - $131,000
   Subcontracts (industrial) - $90,000

Funds from the Division of Rehabilitation Services are negotiated in an annual contract on a fee for services basis. Monies from the Utah State Board of Education for vocational programs for the handicapped are awarded through an annual grant.

Administration

The Columbus Community Center is under the jurisdiction of the Salt Lake City Board of Education with the direct line of authority through the Special Education Department. Each funding source is involved in consultation, joint planning, and coordination.

Houma, Louisiana

The Terrebonne Vocational Rehabilitation Center is a joint effort between the Terrebonne Parish Public Schools and the Division of Vocational Rehabilitation.

Program includes:

4-6 week work evaluation

Placement in and rotation through six core areas of work adjustment

Population

Since the initial agreement in 1965 involving 9 clients the program has expanded to an enrollment of 126.

Classifications of clients handicapping conditions:

90% mildly moderately retarded

10% severly retarded

Many clients reported to be multiply handicapped with secondary disability of hearing impairment, speech impairment, visual impairment, orthopedic impairment, or emotional disturbance.

Clients must meet these entry criteria: (1) have IQ of 85 or below, (2) resident of Terrebonne Parish, and (3) at least 16 years of age.

Funding

The budget of $200,000 is contributed by Vocational Rehabilitation - $50,000 and the local education agency - $150,000

Contractual Responsibilities

Vocational Rehabilitation must provide:

1. Facility Manager
2. Vocational Counselor
3. Clerical staff
4. Necessary supplies, tools and equipment
5. Reimbursement of teachers' salaries during the summer, if such a program is deemed necessary.

The local education agency is responsible for:

1. All full time, certified instructors and aides
2. Janitor
3. Utilities, transportation, lunch and building maintenance.

Elements of Success:

1. Local need for training leading to placement into job market

2. Coordination of effort between Vocational Rehabilitation and local education agency
3. Dedicated, well-trained staff
4. Open communication between Vocational Rehabilitation and the Terrebonne Parish School Board.

Bakersfield, California

The Career Training Center (recently renamed the Ruggenburg Career Center) is in Bakersfield, California.

Program includes five stages:

1. Home School Vocational Preparatory Instruction
2. Initial Career Training Instruction
3. Off Campus Work Exposure
4. Advanced Training Readiness
5. Employment or Post High School Education

Population

The Center serves 210 students daily. The morning session is for EMR students (3-4 hours) and the afternoon session serves learning disabled and emotionally disturbed students (2 hours).

Funding

The State Department of Rehabilitation contributed $58,000 for equipment. The State Vocational Education Department provided money for preservice training of staff and preparation of instructional materials. The State Department of Education, through Title VI-B funds, provided $170,000 for general program start-up and development.

Vocational Education allocates its 10% set-aside funds for the Center each year. Vocational Rehabilitation provides uniforms and supplies, and also helps transportation needs by purchasing bicycles and mopeds for clients to ride to work.

Elements of Success

1. Students are enrolled at their attendance area schools and retain their identity with those schools.
2. Staff members from resident schools accompany their students to the Center.
3. The Center provides replicas of job sites as they exist in the community.
4. Training areas were selected on the basis of an extensive community survey
5. The instructional process is based on satisfying the behavioral objectives - with emphasis on hands-on experience in a real community job

Town and Country, Missouri

The Career Alternates for Handicapped Children Project (CAP) is a part of the Special School District of St. Louis County in Missouri. The Special District serves children who live in twenty-three school districts of St. Louis County excluding the city of St. Louis school. It is a cooperative effort between Special Education, Vocational Rehabilitation and the local school district.

Program

A system for delivery of services for life skills, career education, prevocational skill training and vocational-technical education. Project SCAN (Successful Career Planning through Assessment of Vocational Needs) is an outgrowth of CAP and provides vocational evaluation. The program follows four phases:

1. Career Awareness (primary level children)
2. Career Exploration (intermediate years)
3. Career Preparation (involves part time work)
4. Job Placement and Follow Up

Population

The CAP program serves predominately mildly-moderately retarded, learning disabled, and emotionally disturbed. Vocational Skill Centers which serve the more severly handicapped concentrate on job training and work related attitudes and behaviors.

Funding

The total budget for the CAP program, including the Skills Training Program is approximately $1,900,000:

1. Title VI-C - $48,000
2. Discretionary -$100,000
3. Entitlement - $200,000
4. Vocational Aid - $500,000
5. State Aid - $320,000
6. Local Aid - $700,000

Success

The CAP program is relatively new to interagency cooperation compared to the other exemplary models listed. However, the program seems to have the funding and administration back to continue its growth.

Local Model: Development and Revision

The cooperative agreement in which we are involved combines programs offered by Dallas County Mental Health Mental Retardation and Irving Independent School District (IISD). The Director of special education and the Director of County North Work Training Center (CNWTC) had discussed at length the advantages of combining resources for a more appropriate, comprehensive program. In August 1977 a one year contract was drawn up outlining each agencys' responsibilities for service. The school district would supply (a) one certified special education teacher and one teacher's aide on a twelve month basis, (b) all classroom materials, equipment and furniture, (c) transportation to and from the Center for IISD students.

County North Work Training Center would provide: (a) comprehensive vocational evaluation and vocational training services, (b) would serve six borderline, mildly, or moderately retarded persons aged 16-21 (c) would furnish IISD with reports on forms provided by IISD reflecting client program and progress.

The agreement could be amended with 30 day written notice and approval of other party, and it could be terminated by giving 60 day written notice. Screening of clients would be an interdisciplinary team process with requirement that members from both agencies agree that the CNWTC program was most appropriate placement.

The IISD teacher would teach functional academics in the areas of money management, time/scheduling, reading/writing, and math to all clients of the Center. In return IISD students would receive vocational evaluation, classes in Personal/Social Adjustment, pre-vocational skills, health/hygiene, home management, crafts and workshop training. The Center job placement specialist also work with the IISD students.

Even though the basic goal of the agreement was sound - more appropriate programming through combining services, and the trade-off (vocational training for IISD students in exhange for a certified teacher for CNWTC clients) was reasonable, there were those who insisted that two large agencies could not combine programming successfully.

This skeptical attitude will probably surround most collaborative efforts and can only be countered by those involved - working constantly toward open communication, keeping the common goal in mind, and believing in the project.

Cooperation between Irving Schools and Dallas County MHMR at County North Work Training Center comes more easily with each year. Both parties are more willing to compromise because both have realized benefits from the joint venture.

A new curriculum was written by the MHMR-ISD staff at CNWTC covering all training areas. The curriculum was written so that the format would satisfy both the Individual Program Plan (IPP) objectives requirements of MHMR and the Individual Educational Plan (IEP) objective format required by the ISD.

Program planning for all clients (community and school) is done in interdisciplinary team meetings including personnel from both agencies. MHMR requires that all clients have an annual staffing to review the present programming and make recommendations for program revisions. Since this annual team meeting is very much like the annual Admission, Review and Dismissal (ARD) meetings required by the school district, these meetings are held jointly for school clients. Programming objectives are shared through both agencies with specific service responsibilities assigned to the combined staff.

Clients are entitled to all services of MHMR and support services offered through IISD. That means that IISD students have services available to them such as family counseling and residential alternatives and CNWTC clients have use of materials and media offered through the school materials center and support services such as school nurse.

Three new additions to the contract were made for the '81-82 school year. Twelve IISD students will be served this year and the school will contribute supplies for the workshop training area. Guidelines from the Texas Education Agency for vocational assessment of all special education students were to be implemented during the '81-82 year. The assessment process was divided into three levels. Levels I and II could be easily addressed on school campuses with addition of a few specified instruments, however Level III assessment is comprehensive in nature and would require greater investment in equipment and in facility. At the same time, CNWTC was facing the loss of their vocational evaluator position because of budget cuts. The IISD and CNWTC decided to work together to the benefit of continued quality programming by combining assets. Irving schools provide the personnel for vocational evaluation and

CNWTC provides their vocational evaluation equipment and facility for testing and situational assessment. IISD students, CNWTC community clients and vocational rehabilitation referrals are evaluated by the IISD evaluator at CNWTC.

Another benefit of the joint agreement for clients is that a continuum of service is available. A school student who is placed at CNWTC is at that time admitted into the Dallas County MHMR system. Therefore, when the student reaches 22 and is no longer eligible for school services he is simply transferred to MHMR as primary service provider. All necessary papers were completed at the time of admission, clients and parents have had time to become familiar with services available, and with the contact people who can provide those services. This smooth transition is perhaps one of the most important program features to the client and his/her family.

Irving Schools and Dallas County MHMR have had a mutually profitable consolidation of services in the CNWTC program. Administrators and staff of both agencies have a positive attitude concerning the program and both are willing to make compromises to insure its well-being. Another factor which has largely contributed to the programs success has been support from clients families and from the community.

Planning and Implementation

To begin targeting areas for collaboration, make a comprehensive, objective outline of your agencies services and a description of your clientel. Obtain this same information from other community agencies and place services under general categories. When you have your functions written in a similar format under like categories comparison is greatly facilitated. Illustration one outlines the typical functions of the independent school district, mental health and mental retardation, and vocational rehabilitation.

These service providers are available to most communities. Though some of the services offered are distinct, others are overlapping and serve much the same population. Some of these services are designated for clientel of certain ages and others must be delivered in-house, but with inventive programming others could be shared between agencies.

Service areas which are being shared between these agencies by some local providers are assessment, support services, and work training. Rather than exchange dollars which causes problems in some instances with bookkeeping, personnel and facilities are shared. Personnel can be paid by one agency while being housed in another that has more appropriate equipment. Consumers of both agencies in this case receive the benefit of qualified personnel and suitable facilities with necessary equipment. This alleviates the problem facing many agencies of having trained personnel without the budget for needed equipment or equipment without trained personnel.

In the planning stages of an interagency agreement, keep these factors in mind:

1. List services offered by each agency involved in a form that facilitates comparison
2. Categorize services for each facility considering whether

   a) a mandated service
   b) optional service
   c) duplication of service
   d) gap in service

3. Form an interagency team for planning purposes
4. Define interagency goals and establish time lines for planning process
5. Consider formulating paperwork (such as IPP's, IEP's and IWRP's) that is acceptable between agencies.
6. Address these issues:
   a) Financial responsibilities
   b) staffing
   c) space
   d) joint planning and revision
   e) monitoring and evaluation
   f) referrals
   g) joint programming
7. Community involvement

Planning and implementing an interagency cooperation agreement will mean hours in preparation, compromise and constant striving for open communication. However, the benefit of quality programming for consumers that results in a continuum of service is worth the effort. The benefits will also extend to happier taxpayers and other funding sources due to time/cost efficient delivery.

Illustration 1. Comparison of Services

INDEPENDENT SCHOOL DISTRICT	MENTAL HEALTH MENTAL RETARDATION	VOCATIONAL REHABILITATION COMMISSION
Assessments	**Assessments**	**Assessments**
Psychological Vocational Academic	Comprehensive Diagnosis and Evaluation Psychological Vocational Medical Social	Psychological Medical Vocational
Support Services	**Support Services**	**Support Services**
Occupational Therapy Physical Therapy Speech Therapy Counseling Psychological Vocational Instructional Materials Centers Adaptive P.E.	Occupational Therapy Physical Therapy Counseling Psychological Vocational Family Referral Service Parent Education	Referral Service Counseling Psychological Vocational Adjustment to Disability (financial & emotional) Prosthesis
Vocational Education	**Vocational Education**	**Vocational Education**
Functional Academics Vocational Skills Training Vocational Adjustment	Work Adjustment Training Personal -- Social Adjustment Functional Academics Sheltered Workshop Work Training Centers	Financial Assistance Technical or Academic Education
Job Placement & Follow Up	**Job Placement & Follow Up**	**Job Placement & Follow Up**
Cooperative School/Work On-The-Job Training Work Supervision/Counseling	Community Job Placement On-The-Job-Training	Financial Assistance for Job Training
	Residential Placement & Follow Up	**Transportation**
	Group Home Half-Way House Independent Living Assistance	Financial Assistance To Work Training Medical

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A Systematic Approach to Comprehensive Community Based Education for the Handicapped

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Abstract

Curriculum for the handicapped, in most cases, lacks a relationship with actual community living skills that are required of functional citizens. What is being taught to the handicapped is selected by various non-systematic means. A systematic approach to the development of community-based curriculum is presented in the paper.

The systematic approach directs the educator to the community for collection of actual living requirements which will be utilized as curriculum and a basis for formative evaluation. It is the objective of the systematic approach to prepare handicapped children and youth throughout their school careers for post-secondary community contributions and living.

Education for the handicapped has made great strides during the past decade; however, in some respects, it is still undeveloped. Curriculum for the handicapped, and in particular the mentally retarded, is such an area that lacks emergence. It appears that personal choice on the part of the special educator is the deciding factor as to what handicapped students are taught. Consequently, inconsistency within and among special education programs is blatantly present. For example, one teacher might develop a curriculum based on the "Wouldn't it be nice if they could do this," approach. Another might teach students information and skills selected by the, "But you can't expect as much," approach. A third teacher might use the "But I want them to do well in the regular classroom," approach. Handicapped students graduate from high school having been exposed to a menagerie of facts and skills that have no direct relationship and not direct applicability to adult independent living.

The advent of P.L. 94-142 has brought some direction to the state of affairs in that all students are to be provided an appropriate education based on individual needs. This however does not aleviate the problem of inconsistent curriculum or answer the question of what to teach. Decisions of student needs are still related to personal preference and or professional judgement.

Competency based testing and consequent instruction has brought additional direction to the selection of curriculum. A set of objectives selected by a state level panel are established as minimum criteria for competency and/or successful school completion. However, these objectives are so general that tranference of learning must take place for application.

Even though there are P.L. 94-142 regulations, competency based testing and instruction, the fact still remains that handicapped students are not being taught information and skills derrived from a systematic collection of actual requirements that they must meet for independent living and working in their home community.

Given that there is inconsistency and a lack of realism in many special education curriculums, a systematic approach to the development of a community based curriculum has been devised. This systematic approach will be presented in the following pages.

A SYSTEMATIC APPROACH

This alternative approach to curriculum development for use with handicapped students is based on three principles:

1. A majority of handicapped students remain in their home community after high school graduation.
2. Education is in preparation for adult living.
3. Handicapped individuals can be taught to be contributing and functional memebers of their community.

Given the above principles, the objectives of this alternative approach to curriculum development focuses on a five step procedure, which when completed can become a community based curriculum that encompases information and skills required for independent living in a designated community. The objectives are:

1. Collection of required information and skills for community living.
2. Synthesis of collected requirements into a data bank.
3. Development of school curriculum containing actual community-based requirements.

4. Development of a community-based criterion-referenced evaluation system.
5. Development of an instructional program that teaches students how to live in their home community.

This alternative approach is systematic in that each step in the development is contingent on completion of the immediately proceeding step (Figure 1). Once the objectives are met, only minor changes are necessary to maintain the curriculum to keep it up-to-date and realistic.

Step One

The first step is that of collection of community living requirements. Areas for collection that might be considered are:

1. Banking - How to use a bank and its services.
2. Shopping - How to shop for food and household goods.
3. Shopping - How to shop for clothing, luxuries, and toiletries. household maintenance items.
4. Shopping - How to shop for motor transportation, furniture, large appliances.
5. Recreation - How to be a spectator and participant.
6. Health Care - How to use emergency services. How to secure routine health maintenance, dental care and pharmaceutical items.
7. Civic Activities - How to participate in national, state, and local civic activities. How to use city and county agencies.
8. Mobility Skills - How to get around in the community.
9. Church Related Activities - How to attend and serve a church.

A questionnaire to facilitate collection of requirements can be developed using the above areas as guidelines. Once developed, the questionnaire can be utilized for most communities and/or geographical areas with a few additions and deletions. The questionnaire essentially asks the following questions:

1. What information must a consumer know in order to *select* a facility or service (bank, store, church, hospital, etc.)?
2. What information is needed to *use* a selected facility or service?
3. What skills are needed to *use* a selected facility or service?
4. To what *extent* are information and skills contingent on successful use of facility or service?

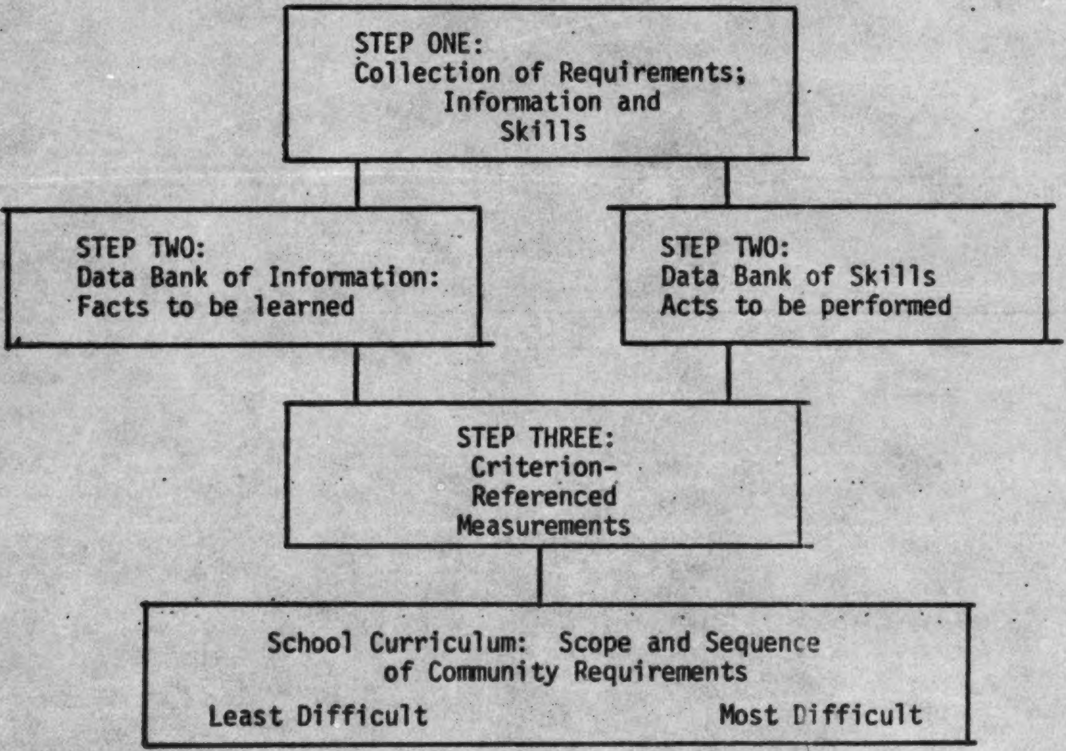
STEP ONE:
Collection of Requirements; Information and Skills
STEP TWO:
Data Bank of Information: Facts to be learned
STEP TWO:
Data Bank of Skills Acts to be performed
STEP THREE:
Criterion-Referenced Measurements
School Curriculum: Scope and Sequence of Community Requirements
Least Difficult
Most Difficult

Figure 1. Steps in the development of the community-based curriculum.

Step Two

Once the collection of requirements is complete the synthesis of information and skills can begin. If the use of a computer is available, requirements can be easily programmed. However, synthesis can be completed by hand by listing (1)information and (2)skill requirements. Duplications can be deleted whereby an exact list of all community living requirements will evolve.

Step Three

The third step in the development of a community-based curriculum is the arrangement of requirements (and prerequisites) in sequence according to difficulty and/or order to be taught. This can be accomplished by asking the question of each requirement, "What does one need to know in order to know this information or demonstrate this skill?" Initially this step appears insurmountable; however, facts and skills begin to "fall" into place as logic takes over. Published scope and sequence charts may be helpful as references. A sequenced curriculum is important so that various age and capability level students can become involved in learning the requirements.

Step Four

Criterion-referenced tests can be developed for each area of information or skill to be taught. Guidelines for developing such tests can be easily found in published literature. The tests are to be used with individual students to ascertain competenceies and areas for instruction. Once a student progresses through a sequence of tasks, an ultimate evaluation might be to actually involve students in use of community facility or service.

Step Five

The final step is that of development of an instructional program and its implementation. Although individualized instruction will be utilized, much can be done in planning and organizing instruction prior to contact with students.

1. Actual printed materials that will be used can be gathered.
2. Maps for community mobility can be made.
3. Contact with community personnel can be made for on-site visitations.
4. Paper and pencil activities can be developed for instructional support.
5. Thirty-five mm slides can be taken for classroom presentations.
6. Audio tapes can be made of interviews with other community consummers, facility managers or personnel.
7. At-school visitations by facility managers can be planned.

Actual inplementation of instructional program can begin as soon as a child enters school. There are many prerequisites facts and skills to be learned prior to attainment of specific community requirements. Continued growth through the sequenced instructional program will culminate in the attainment of community functionality and contribution. The relationship of components in the instructional implementation can be seen in Figure 2.

SUMMATION

A systematic approach to the development of curriculum for the handicapped has been presented. This approach, using actual community living requirements as objectives, provides special educators with the basis for a realistic curriculum that can be taught to handicapped students during their years of formal education. This curriculum can be utilized as a part of each students total education in preparation for adult living.

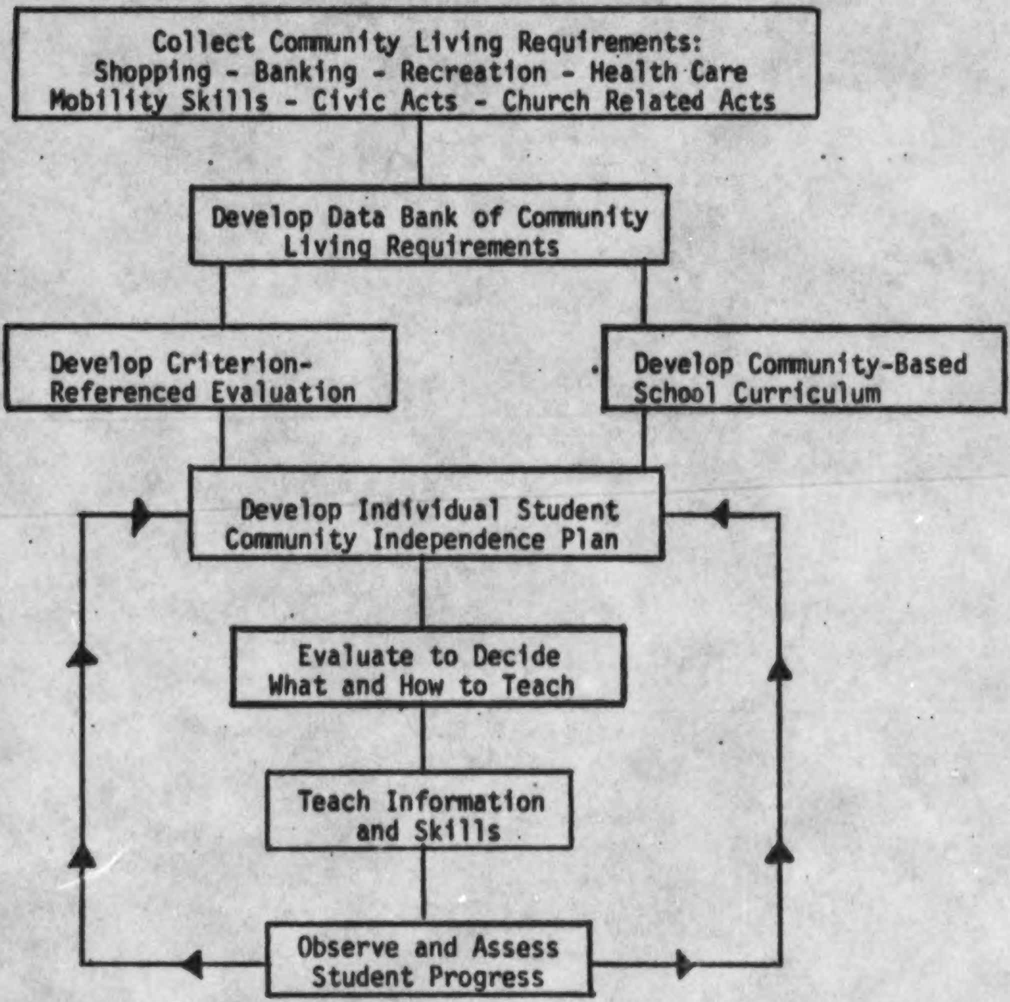
Collect Community Living Requirements:
Shopping - Banking - Recreation - Health Care
Mobility Skills - Civic Acts - Church Related Acts
Develop Data Bank of Community Living Requirements
Develop Criterion-Referenced Evaluation
Develop Community-Based School Curriculum
Develop Individual Student Community Independence Plan
Evaluate to Decide What and How to Teach
Teach Information and Skills
Observe and Assess Student Progress

Figure 2. Teacher implementation of the community-based curriculum.

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School Based Work Activity Center:
A Transition from School to Sheltered Employment

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The Wyandotte County Comprehensive Special Education Cooperative has a rich history of providing for the vocational needs of our special students through a continuum of services. Programs that serve these vocational needs include regular Vocational-Technical training, vocational evaluation and work adjustment through a Special Vocations project, work-study in competitive community placements, and vocational training through a sheltered workshop setting. Despite a seemingly comprehensive continuum, one population with vocational needs did not fit readily into the existing structure.

Background

In 1976 a very special program was begun in our Cooperative for elementary aged children diagnosed as autistic, schizophrenic, or otherwise severely emotionally disturbed. These children were those that obviously could not benefit from a less restrictive placement in existing classes for the emotionally disturbed. The program focused on functional academics and behavior management. As the students assigned to the Severe Personal Adjustment (SPA) program began to reach adolescence and the reality of life after school became imminent, the staff of the SPA program requested vocational services be added to the program. A vocational counselor was assigned to function as the liason between community agencies and the SPA students; the options for community based placement were explored. Students were referred to

Vocational Rehabilitation for vocational evaluation and possible training.

Vocational Rehabilitation purchased evaluation from the one sheltered workshop in our county. The first two students to participate in the evaluation were the two most skilled as judged by the SPA teacher and the vocational counselor. It was hoped that based on the evaluation, the students would be put on the Title XX waiting list and referred to the sheltered workshop for long term placement for gainful employment. Unfortunately that was not the recommendation. The conclusion of the evaluator for the first student was placement in a work activities center despite the fact that the county does not operate a work activities center. The results of the second student's evaluation was no better. The evaluator actually recommended institutionalization. Despite the efforts of the school program toward normalization, the students appeared destined for isolation at home or placement in a residential setting for their adult years.

The problem behaviors revealed through the evaluation indicated that while the students seemed to possess the manipulative skills required by sheltered workshops and were able to produce consistently beyond the 30% competitive level, they did not know what to do during breaks, lunch, or when they ran out of materials. They also had difficulty with working in large groups, changing tasks, or persevering at the same task for hours or days at a time.

Gold (1975) maintains that many individuals who exhibit what may be considered deviant or inappropriate behavior are tolerated because of their ability to render productive work for their employer. While the SPA students were characterized as possessing deviant behavior from the norm of the sheltered workshop clients, it was our belief that through training, the deviant behaviors could be eliminated or production rate so increased that the workshop personnel would choose to ignore the deviant behaviors. The educational technology exists to train severely handicapped individuals to function productively (Bellamy, O'Connor, and Karan, 1979). Consequently, a new vocational program was added to the existing structure to serve the vocational needs for the SPA students as well as other severely impaired students who exhibited the potential for gainful sheltered employment and whose vocational needs were not being met by their present placement. The Work Activities Center (WAC) became the newest dimension of the vocational spectrum.

Philosophy

The WAC evolved philosophically from the Kansas State Plan (1980) and may be characterized as a work oriented training program for those individuals who would not be able to make the usual transition from pre-vocational training to a sheltered work environment. This dysfunction may be a result of either behavioral interference, skill level, or a combination of both. Work related activities are to be the focal point of the WAC but the prevailing philosophy is the total enhancement of the students' lives. The primary goal of the WAC is to prepare students for sheltered employment but preparation for community based employment should not be disregarded. The various objectives which will enable the students to reach the goal of gainful employment include:

1. the increase of independent behavior
2. the acquisition of necessary work habits
3. the development of personal and social skills which will enable the students to perform sucessfully both on the job and in the community
4. the development and maintenance of the educational skills to prepare students to function in their environment.

The pupil-teacher ratio for the WAC was set at 1:6. A survey of existing programs revealed that approximately 12 students might qualify for the program at any given time. Two full-time professional staff were assigned to the program with expertise in behavior management and rehabilitation training. Also assigned were a vocational counselor and a paraprofessional.

Student criteria for WAC placement were established.

The student should:

1. Have the potential to be gainfully employed.

2. Be socially isolated to the point that this bevior inhibits the likelihood of employment.

3. Exhibit behaviors that will prevent him/her from functioning in a sheltered workshop or community setting.

4. Demonstrate the potential for learning work habits necessary for placement in a sheltered workshop or community setting.

5. Be seen by staff as needing a long term period of training for one or more of the vocationally related preoblems.

6. Demonstrate the ability to function independently in caring for personal health and hygiene needs.

7. Be at least 16 years of age.

In addition, the staffing committee should be presented with:

8. Documented evidence that efforts to remediate the problem(s) have been attempted in a less restrictive environment.

Combinations of two or more of these areas may qualify a student for WAC placement. The decision for this placement will be made by a staffing committee comprised of WAC personnel, school psychologists, sending program personnel, and relevant support personnel.

Design and Academics

The school day has been structured to simulate a workshop environment. The first activity in the morning is approximately 15 minutes of social interaction. Because of the characteristics of this type of population, social interaction does not often occur spontaneously and will usually be expected in most employment situations. After the period of social interaction training the students are assigned to either academic instruction or vocational training. One break is given during the morning at which time students must engage in appropriate break-time activities such as looking at magazines, listening to the radio, group games, or eating a snack. Shaping appropriate break-time behavior is imperative for the WAC students because they will be expected to function independently during these times while employed. Lunchtime is also considered training time with independent and appropriate behavior being shaped and reinforced. The afternoon is spent in vocational training. Before going home, the students service a juice machine sponsored by the WAC program. In addition to the daily schedule, speech therapy and adaptive physical education occurs twice a week; music therapy occurs once weekly. For those students nearing readiness for employment, the time spent in the vocational portion of the program can be increased so the the student is working on a "job" for at least five hours each day.

The academic program is basically functional academics and includes name writing, survival work recognition, language development, money concepts, and counting. The curriculum is highly individualized and geared toward skills necessary for independent living and the maintenance of employment.

Vocational Programming

The methodology for vocational training is twofold. Primarily workshop type jobs are simulated and students carry out these jobs in the same manner as they would in a sheltered workshop. WAC personnel keep detailed and accurate records of the production rate of the students. Data is also collected on work behaviors such as on task behavior, disruptive behavior, job performance behaviors, inappropriate personal behavior, attention seeking, annoying mannerisms, and independence.

Simulated workshop jobs were designed based on a survey of the types of work done in local sheltered workshops. Some material was purchased and other was donated by local businesses in order to develop specific job tasks. Examples of the types of tasks included in our curriculum are envelope counting and packing, telephone face-plate cleaning, printed material operations, color sorting, collating, washer assembly and packaging, book assembly, syringe assembly, bagging, object sorting, and zip code sorting. Not all students were able to complete each task and students are encouraged to progress from the more simple tasks to the more complex.

The second type of vocational training occurs on actual jobs contracted from businesses in the community. It has become the function of the vocational counselor to coordinate this effort. Actual contract procurement is the joint responsibility of the WAC staff and the vocational counselor. Potential contracts are screened by WAC personnel to determine the appropriateness of the job. The WAC has refused contract work if that contract potentially would jeopordize the philosophy of a training institution. Because of our small size we are limited in the scope of contracts we can accomplish in a competitive time frame. While too much pressure to fulfill contracts can subvert the training mission of the WAC and possibly cause us to lose sight of our students' needs, the proper amount of urgency to meet a contract deadline with quality work provides our students the reality of sheltered employment. Contract work is also desirable because actual contracts usually involve more pieces that we can simulate. This gives us the training opportunity to increase perseverance. The money earned through contract work is distributed to the students based on their production rate.

Behavior Training

Probably the most crucial element of the WAC program is behavior management. Specific techniques that have been used successfully by the WAC personnel include over-correction to eliminate interfering behaviors, positive reinforcement in the form of praise or snacks, in-seat time-out, and the removal of work for inappropriate behaviors. Monitoring of behavior is done regularly through the use of frequency counts, measurement of the duration of the behavior, and time samples.

Issues

While the program is operating smoothly and our students are beginning to prepare for the world of work, several issues have been raised that are yet to be resolved.

1. It is very difficult and expensive to simulate jobs that require a student to remain working on them for several days or weeks. The number of pieces required prohibits the purchase of many long jobs and companies do not usually have large numbers of items they can or will donate. Without this simulation, it is difficult to predict our students' future behavior on a long-term repetitive workshop task.

2. The issue of work versus training also needs to be resolved. The procurement of contracts may very well solve the above issue. Companies expect contracts to be completed in a minimum amount of time. When the deadline begins to draw near the focus of the program could easily

shift from that of training to production. While some stress associated with impending deadlines adds to the reality of a training workshop, too much stress may very well lead to the disregard of training opportunities or student needs. A thin line exists between training and production. A training institution must be very careful not to become so involved in revenue generation that the payoff of training and preparation is sacrificed.

3. The issue of contract procurement becomes complicated also because of our small size. At the present time we are serving six students, all exhibiting different and varied levels of skills. Contracts must be small, with a liberal time line, and must be adaptable for a variety of skill levels.

4. Another issue we need to resolve is the criteria for workshop or employment readiness. In order to solve this problem we need to establish a working relationship with the sheltered workshop our students may be destined to participate in. A problem we encounter is that there is currently a one year waiting list for placement in the workshop. With funding in jeopardy for all social services, the waiting list could even get longer. Another consideration is that our students represent a risk, at best, to the workshop. With so may typical clients waiting will our students have a chance? A third consideration is that the sheltered workshop

has no specific minimum requirements delineated. Any training we do needs to be aimed at an end product. What that end product should be has to be based on educated conjecture and faith. Although a good working relationship has been established, what we are doing today may be inappropriate tomorrow.

Because of the lack of community based alternatives for students such as ours, the WAC represents probably the only chance our students have for becoming productive members of the mainstream of society. Through the efforts of the professionals involved and the desire to achieve as exhibited by our students, the question is not will our students be ready for the community. Rather, the only remaining question becomes will the community be ready for our students. Let us hope the answer is yes.

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THE ORGANIZATIONAL STRUCTURE
of
ALTERNATIVE VOCATIONAL PROGRAMMING
for the
HANDICAPPED
in
EAST BATON ROUGE PARISH SCHOOLS

PRESENTED TO:
THE INTERNATIONAL CONFERENCE
on the
CAREER DEVELOPMENT
of
HANDICAPPED INDIVIDUALS
NOVEMBER 19-20-21, 1981
DALLAS, TEXAS

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This paper is presented to describe the organizational plan for the development of an Alternative Vocational Program for the Handicapped population in East Baton Rouge Parish Schools.

East Baton Rouge Parish is one of sixty-four parishes located on the Mississippi River in the south central region of the State of Louisiana. The parish population is estimated to be 603,565 people. State and local government operate in Baton Rouge, the capital city employing over 18,000 people. The governing body at the parish level is cooperatively managed by the mayor and city-parish council.

The largest petroleum refinery in North America is located in Baton Rouge. The city has about 150 plants, manufacturing such products as fabricated metals, food products, lumber and wood products, printed materials, and synthetic rubber. Baton Rouge is the fourth largest port in the United States and one of the largest inland ports in the world. The city is also a distribution and transportation center for farm products grown in the area.

East Baton Rouge Parish is a center of higher learning with two universities in the metropolitan area, Louisiana State Universit and Southern University. The multitude, variety, and size of industries located in the Baton Rouge area help to support a developing vocational technical education program to serve the needs of these industries. East Baton Rouge Parish has about 140 schools, including parochial and private schools, accommodating about 75,000 students from kindergarten through 12th grade. In addition, the city has four business colleges; two state schools (blind and deaf) and two trade schools.

There are 15 high schools in East Baton Rouge Parish School System of which 14 are served by the Alternative Vocational Education Program for the Handicapped. The student population of the 14 high schools served is 17,593. The estimated handicapped population numbers 675 resource and self-contained students. Two vocational centers serve the moderately and mildly handicapped students with a population of 285. The total handicapped population in the parish, combining those in the high schools and vocational centers, is 957 students.

Several factors will continue to influence the structural flexibility and organizational design of this project in meeting individual student vocational educational goals. The first major factor is the distance between secondary schools to be served by the project. The time used for travel could be more wisely spent in delivering services to the handicapped population. The second factor is the differences in the philosophical emphasis of those schools being served and the manner in which those philosophies are translated into individual students goals. Third, differences in specific vocational course offerings in each high school will influence student scheduling modifications based on each student's assessed vocational aptitude, interests and potentials.

LEVELS OF CURRICULUM DEVELOPMENT

In past years in East Baton Rouge Parish, handicapped students have had little or no vocational training. The little training that was taking place was random and loosely organized with no real vocational assessment. As a result of this unorganized effort, numerous students were completing their education with neither marketable job skills nor traditional academic preparation for a higher education. Many others were just dropping out.

This project is designed to identify these students, evaluate them extensively, and direct them into fields of study in which they show promise of establishing successful careers.

Because of the obvious need for specific vocational training the school system made application to the Louisiana State Department of Education for funding of the "Alternative Vocational Programming for Handicapped Students in East Baton Rouge Parish." This project is a cooperative effort of the Vocational Education and Special Education Departments of East Baton Rouge Parish School Board and is funded by the office of Vocational Education, Louisiana State Department of Education, under section 130 provisions, Public Law 94-482.

Although the program is funded by vocational education, it is jointly supervised by vocational education and special education. It is the alternative vocational staff which works directly with the handicapped students and the vocational education and special education teachers.

An essential element of the project is the development of scheduling modification alternatives. Four alternative programs have been developed to provide relevant vocational training according to the handicapped student's needs. The first level of the vocational program is designed for the handicapped student who is seeking a diploma. The vocational program at the second level offers the resource student an alternative to the diploma program by eliminating various required subjects and allowing in-depth vocational training in specific occupational skill areas. Third level vocational programs address the independent living and vocational needs of special education students who are in half-day self-contained services. The fourth level program is directed to the organization of vocational programs which are housed at special education centers.

REFERRAL PROCEDURES

When the special education teacher identifies a resource student who exhibits the need for a change in his/her educational program, the teacher will initiate proceedings for making this adjustment.

The special education teacher consults with the student and the parents and discusses the Alternative Vocational Programming Referral Form for Handicapped Students and forwards it to the vocational facilitator.

The special education teacher then schedules an Individual Education Program (I.E.P.) conference to be held after 15 operational days and no more than 20 days after submitting the referral form.

Within 10 operational days the special education teacher administers specified vocational sections of the Brigance Inventory of Basic Skills in preparation for the I.E.P. conference. The vocational facilitator, a member of the project staff, then interviews the referred student and completes an informal vocational inventory which generally assesses the student's vocational interest and abilities.

The I.E.P. conference is held as scheduled, at which time all information is discussed and if the committee agrees, a new I.E.P. is written specifying a program change.

WORK-STUDY

Students are referred to the Work-Study Program who are ready for concrete employment experiences or who are at the point of dropping out of school. The special education teacher discusses with the student and parents the referral possibility. If there is agreement, the Work-Study Program Referral Form is completed and sent to the vocational facilitator.

The facilitator contacts the parent/guardian to explain the program in detail and possible services it might render. If interest is indicated, the facilitator instructs the teacher to send a Parental Consent Form home by the student.

At this time, the teacher completes the Student Progress Report and, together with the signed Parental Consent Form, sends them to the facilitator. The student will then be interviewed by the facilitator.

Placement of the student at work sites will be made according to the students prior employment experiences, his interests, and the results of informal vocational assessment.

COMPONENTS DEVELOPED BY THE PROJECT

After the referral procedure is made and the type of vocational program is established it becomes necessary to develop components of the project to ensure successful completion of the student's vocational training. The following are areas explored by the project the first funding year:

A. Accessability of the High Schools to the Handicapped:

The concern in this instance was to identify barriers or other obstacles which could affect the progress of handicapped students attending vocational education classes within the school system. The accessability of classes to the handicapped is a most important step in bringing the services of the project into focus by locating the least physically restrictive envoronment as it relates to the students appropriate vocational education placement.

B. Optional Transportation Systems:

The availability of transportation for the handicapped student was investigated. Should the vocational classes needed by the student be unavailable at his school, the school system will provide regular transportation for the student to a newly designated school having appropriate offerings. This transportation will be restricted to handicapped students needing transportation to a school for a full-day attendance and will not be used for students only wanting isolated vocational courses. Other methods of transportation were explored to compensate for the rigidity of the regular school transportation system. Two other possibilities are available other than parent or student owned transportation. At present this project utilizes two small vans to transport students to on-the-job training and temporary employment situations. Where feasable these two units will be used. The project hopes to acquire another vehicle during the next funding year which will add to the flexibility of the project's capability of assisting in the transportation of students in extreme cases to an appropriate school site. The final transportation possibility available to the project is public transportation. Student use of public transportation would depend on the student's handicapping condition and parental permission. To determine the feasability of the use of the public transit system, a vocational facilitator rode public transit buses to accurately ascertain transportation procedures and the time taken to travel from any school served by the public transit system to another. This possibility is time consuming and will be used in rare instances.

C. Tracking Card:

When a student is referred to the Alternative Vocational Program, a Tracking Card is used. The tracking card will summarize the student's vocational evaluation, work experiences, training and academic skill levels. This card will give the vocational facilitator a quick overview of the student's vocational status.

Through careful assessment of the student's Tracking Card in respect to information provided, the facilitator can use this instrument in selecting the best suitable type of employment for handicapped students..

D. The Community Directory:

The purpose of this directory is to provide educational personnel serving the handicapped student with a readily accessable listing of sources of community agencies, individuals and organizations capable of meeting additional needs of the handicapped student which cannot be provided by the school system. Primarily, the personnel using this directory will be principals, assistant principals, guidance counselors, vocational and special education teachers, and other personnel in related departments serving the handicapped student at the secondary level. The Community Directory includes an alphabetical and classified index with a descriptive section of specific agencies and organizations providing services to fulfill other personal needs of the handicapped student.

PROJECT PERSONNEL

The key person in the Alternative Vocational Program is the vocational facilitator. The general responsibility of the vocational facilitator is to define employment opportunities for handicapped students through the development of certified alternative vocational education programs at the secondary level. The specific performance responsibilities include: identifying handicapped students in each school; acting as consultants in I.E.P. conferences; assisting vocational teachers with handicapped students in the effective use of aides, equipment and supplies, and teaching techniques and; interacting with the business community for the purpose of job placement, training and follow-up activities of the handicapped.

The four vocational facilitators are assigned to schools in clusters with a maximum of four schools in each cluster. Each cluster of schools is located in the same general area of the parish. Initial interaction with special and vocational educators is accomplished through small group meetings and individual conferences.

Because of the unique characteristics of each high school, the vocational facilitator must be prepared to adapt to individual situations. Diplomacy, flexibility and objectivity are all important responsibilities of the vocational facilitator for greater program effectiveness.

FUTURE CONCERNS OF THE PROJECT

The first funding year of this project is a significant step by the East Baton Rouge Parish School System to bring into focus the most effective methods of delivering vocational training and eventual career placement to its handicapped student population. During this organizational period it has been found that to be successful in vocationally assisting the handicapped student and to be able to totally integrate the project into the schools served, other additions and activities to the project will be necessary. These activities and additions will have to be completed in future funding years. First, the effort has to be made to clarify the roles of administrative, vocational and special education teachers and their capacity to deliver total vocational training services to the handicapped population. This role clarification will be completed through structured inservice programs during the second funding year. Second, this project will not be effective in serving the vocational needs of the handicapped student without adding a formal vocational evaluation component to the project. Vocational assessment must be specific in pinpointing student aptitudes and potentials for placement in appropriate vocational training which should lead to successful employment. Third, all handicapped students participating in this program will not be able to successfully attend regular vocational education classes. To address their vocational goals, it will be necessary to adapt vocational areas so that they will be able to deliver needed skills to the handicapped student at his level of capability. These adapted vocational areas taught by certified vocational education teachers will be directly related to community employment availability.

CAREER EDUCATION IN THE ARTS
FOR THE MENTALLY AND DEVELOPMENTALLY HANDICAPPED

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CAREER EDUCATION IN THE ARTS
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Pilot Project Supported By:

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East Brunswick Board of Education
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CAREER EDUCATION IN THE ARTS FOR THE MENTALLY AND DEVELOPMENTALLY HANDICAPPED

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ABSTRACT

Career opportunities for handicapped individuals are traditionally limited, regardless of government regulations. Because of this, there is a great need for handicapped individuals and those involved in educating them to become aware of individual strengths, abilities, and as broad a spectrum of career options for this population as possible. In this direction, East Brunswick initiated a pilot project entitled "Career Education in the Arts for the Mentally and Developmentally Handicapped." The focus was on the abilities of handicapped learners rather than on their limitations. The effort was to expose these learners to potential career opportunities in the creative world of the arts by stimulating their interest and encouraging use of their inherent, creative talents. The ultimate goal was to create an awareness of a greatly increased number of career options for this population, especially in the world of the arts.

Professional artists demonstrated a variety of art forms, followed by hands-on student experiences. Students became aware of abilities they had never realized they had. It was obvious that a more positive self-concept was evolving through success in accomplishing projects based on their newly discovered talents. They were also made aware of how their individual talents, when combined with those of others, formed a complete project in various art forms. For example, during one segment of the project, students tape-recorded sound effects and then improvised movement to the recorded sounds. They were shown that sound and movement,

in addition to lighting, staging, writing, and many other talents, make up a whole theater production. Each component, however, was expressed and experienced as a possible independent career option, depending upon the individual interest and talent.

An unanticipated but extremely meaningful supplementary outcome was that instructors gained a deeper, more thorough understanding of the capabilities and inherent talents of their students. They were made aware of a new dimension in education and career preparation through an indirect learning approach, using the natural talents and genuine interests of the individuals regardless of their handicaps.

The major unique aspect of this project was the fact that it took into consideration abilities of handicapped individuals rather than focusing on their limitations. It presented opportunities for growth in awareness and skills and afforded great possibilities for success by encouraging student self-expression as well as fostering achievement through positive feedback. The instructor was encouraged to direct the activities in an unrestrictive, supportive manner. New exchanges of respect, as well as increased self-respect for the educator and the learner, emanated from a variety of sequences of the presentation.

NEED

Special education students have traditionally been either confined to self-contained classrooms or mainstreamed on a limited basis. The major thrust of programming, however, regardless of assignment, is toward academics. Methodology more often than not parallels that used for general student populations. Unique learning needs, as well as appropriate educational planning encompassing realistic vocational goal preparation for special populations, are too often overlooked. Research has indicated that a large percentage of high school and even college graduates are ill-prepared for the world of work. Their academic backgrounds, although important, are not enough to accomplish well-prepared, productive and competitive adults in the vocational sphere of life. These individuals find some comfort in putting blame for their situations on the job market, the country's economic condition, etc. Special populations, however, more than likely cast blame upon themselves, feeling inadequate in reference to their personal limitations which impact upon their abilities to compete in the job market.

A major need for both the normal and the special population of students is to develop a curriculum which exposes students to career options. It is critical that this curriculum allow for individual differences and have a means of identifying abilities in the areas of academics and talent. It should further focus on the development of skills to the capacity of the individual for specific, realistic and appropriate careers. It need be noted here that although the object of this project focused on the special education population, reference is also being made to needs in this area for the normal population.

BACKGROUND LITERATURE

The first major factor to be considered in establishing the East Brunswick project was student self-esteem. Since there is much vagueness and variety in definition of self-referent constructs, for purposes of this paper self-esteem is defined according to Coopersmith (1967) "Self-esteem...focuses upon those antecedent conditions that contribute to the development of positive and negative attitudes toward oneself" (p. 1). In studies conducted by Coopersmith with normal children, he found that individuals with high self-esteem set significantly higher goals for themselves than persons with medium or low self-esteem (p. 246). His studies further suggested that "social aspects of individuals with low self-esteem are marked by a lack of faith, expectations of failure, and anticipation of rejection..." (p. 251). The implication of these studies is that if normal children are affected in their social abilities and academic expectations by their self-esteem, it is reasonable to assume that special population individuals are similarly affected.

A study by Hoffman and Weiner (1978) dealing with 72 trainable mentally retarded adults investigated the effects of feedback on skill performance of these individuals. They found that where success was followed by positive feedback on attributes related to ability, success in subsequent performance was enhanced.

Other studies indicated that the variable of self-esteem has an impact on learning ability and that achievement parallels the level of self-esteem. In searching the literature, few studies were found dealing with the impact of self-esteem on skill growth in special populations.

A study by Klugerman (1981) dealing with 50 trainable to low educable mentally retarded adults found that I.Q. did not correlate with self-esteem and that substantial growth in basic skill ability was achieved regardless of I.Q. (p. 58). The study attempted to determine whether counseling specifically to self-esteem growth would impact significantly on growth in self-esteem. The findings indicated that self-esteem increased significantly in both the experimental and control group regardless of the counseling intervention. The implications of these findings suggest that achievement may be a major factor in promoting an increase in self-concept. Supplementary analysis suggested that achievement may result in significant increases in both self-esteem and skill ability for this population. Based on the implications of past research findings, the East Brunswick project attempted to accomplish growth in the self-concept of special education students through promoting awareness and successful use of their talents in the field of the arts. Throughout this process, career options were pointed out during each exposure and activity.

PILOT PROJECT

There were 210 special education students ranging in age from 5 - 20 and 22 special education teachers involved in this project. Student classifications included trainable mentally retarded, educable mentally retarded, emotionally disturbed, communication handicapped and neurologically impaired. They were exposed to realistic job options for future consideration. The project initially offered several workshops designed to increase staff awareness of job options in the field of the arts, as well as the student skills necessary for obtaining particular jobs. In addition, the training focused on what would be rational job choices for particular students, giving specific attention to their individual strengths, abilities and talents regardless of their special education status.

Programming included a variety of art spheres offering hands-on opportunities under the direction and supervision of consultant artists. The spectrum of areas included visual art, pottery and ceramics, creative drama, storytelling, weaving, puppetry, film-making, music, folk singing, movement and dance and mime. During field trips to museums and newspaper offices, students were exposed to the gamut of job opportunities from custodian to executive which are involved in the smooth functioning of these professional operations. All activities were conducted in minimally restrictive environments. Students were encouraged to participate in activities, ask questions, offer comments and create products. Instructions to students were geared mainly to safety, thereby encouraging and permitting talent to flow freely. Tie-dye tee shirts with free form designs, puppets, paintings and weavings are a few examples of products created by students through this process which have potential for future careers.

Another aspect of this project took students to a small local theater where, under the direction of the theater manager, they brought forth talents in movement and sound (human and mechanical), coupled with a variety of props, to create a improvisation-type production. In addition to the vocational opportunities inherent in the production portion, it was also pointed out that the theater required cleaning, lighting and prop movement, as well as ticket sale and collection, for a production of any sort to occur. All of these categories of involvement are potential job options.

OUTCOME

Students became aware of personal abilities which they had previously not realized. In addition, they were made aware of career options based on these abilities. Exposure and success in new activity involvement appeared to enhance student self-concept. Student attitude and teacher feedback seemed to substantiate this observation. Conclusive statistical data, however, is unavailable in that the measurement instrument used to determine project success was not effective in measuring student growth. We feel this to be a major limitation in reference to currently available appropriate assessment devices dealing with this population.

An extremely meaningful supplementary outcome of the project was an increase in staff awareness of classified students' abilities in the artistic sphere. The understanding gained offers new dimensions pertaining to curriculum development for this population in both career awareness and job skill preparation. Infusion of career awareness and training in the arts for this population offers new success possibilities for students, as well as the potential for greater instructional success and gratification for staff. Awareness of many career options in the arts which call more heavily on the talents emanating from the affective and the physical domains and less heavily on cognitive skills make this exposure and experience particularly attractive for the classified student regardless of intellectual skill.

RECOMMENDATIONS

1. Assessment instruments dealing with this population, particularly in the area of self-esteem and skill growth, are virtually nonexistent. Instruments should be created which include devices which can measure:
   (a) student self-concept
   (b) student skill ability (talent)
   (c) student awareness of career options in the arts in general
   (d) student awareness of career options based on individual talent

2. Additional research dealing with the impact of self-esteem on skill ability growth for special populations should be conducted.
3. Projects similar to the pilot project conducted in East Brunswick should be developed. This type of project is extremely cost-effective and easily replicated in other districts. A one-time workshop conducted by community professional artists following the format of the East Brunswick project can serve to train classroom and district art staff for an on-going program infusion into the regular special education curriculum. Most materials and supplies are found in any school. Business establishments or cultural centers within the district's confines can also be utilized for particular learning sessions, which may ultimately offer concrete career opportunities to students.

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Implementing a Comprehensive Career and Vocational Education Program for Handicapped Students

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Implementing a Comprehensive Career and Vocational Education Program for Handicapped Students

Vocational education, and in recent years, career education have become an integral part of the American educational system. Unfortunately, many handicapped children and youth have had limited opportunities to benefit from such programs as conceptualized. Restricted emphasis on vocational education for the handicapped was evident until passage of legislation during the 1960's and 1970's which recognized the need to provide vocational education, career education, and employment opportunities to them.

As more handicapped students are processed through a series of educational experiences in their elementary and middle school special education programs, and in the future many more of them arrive at the secondary school level, a need for educators to provide the necessary programmatic options will be necessary. Many are in need now and more will benefit from learning experiences which can best be provided through career and vocational education. Because of the growing interest in special education programming at the secondary level, programs for students traditionally classified as mildly handicapped appear to be among the most needed within our educational system. However, recent trends make the educational and occupational outlook much brighter for handicapped students presently enrolled in special education programs based on indicators such as (1) recent legislative acts that have increased funding to such programs, (2) the increase in special conferences and programs at conventions which focus on career and vocational education topics, (3) newsletters and publications from the field of education, (4) information retrieval centers, (5) establishment of professional organizations; e.g., the Division on Career Development of the Council for

Exceptional Children; the National Association for Vocational Education Special Needs Personnel of the American Vocational Association, (6) the increase in pre- and in-service courses and workshops in career and vocational education for the preparation of teachers, (7) better accessibility to career and vocational education program opportunities for the handicapped, (8) the increase in the number of secondary school special education programs, and (9) the increase in positive attitudes toward the handicapped in the community especially by employers. Positive changes are occurring and there is a degree of optimism which prevails among the educational communities.

The remainder of this article will address the following areas, (a) definitions of career and vocational education, (b) a description and the components of a comprehensive career and vocational education program, (c) issues related to placement of handicapped students into vocational education programs, and (d) a description of a model comprehensive public school career and vocational education program.

Definitions

Professional workers in vocational education have not suffered from the lack of an operational definition as have those involved with career education. Several definitions of vocational education have emerged over the past 60 years of its existence. The most recent definition and the operational definition of vocational education used in this article is from the Code for Federal Regulations, 45 Public Welfare:

> The term 'vocational education' means organized educational programs which are directly related to the preparation of individuals for paid or unpaid employment, or for additional preparation for a career requiring other than a baccalaureate or advanced degree; and, for purposes of this paragraph, the term 'organized education program' means only, (a) instruction related to the occupation or occupations for

> which the students are in training, or instruction necessary for students to benefit from such training, and (b) the acquisition, maintenance, and repair of instructional supplies, teaching aids and equipment, and the term 'vocational education' does not mean the construction, acquisition or initial equipment of buildings, or the acquisition or rental of land. (p. 166)

The authors believe that the career education movement has suffered from the lack of an operational definition. Furthermore, if career education had been operationally defined when first introduced by Sidney Marland, former Commissioner of Education in 1971, possibly many of the problems encountered in implementation and research would not have occurred. In the early stages of the career education movement, professionals were inclined to agree with Marland that the concept of career education should evolve through the efforts of education professionals, parents, businessmen, and labor to meet the needs of our children and youth. Unfortunately, this resulted in a lack of direction and commitment by many professionals and little, if any, comprehensive programming. Because of this initial lack of an operational definition for career education, a certain amount of confusion continues to exist among various professional groups regarding definitions of vocational and career education and their relationship to each other. The operational definition of career education used in this paper is:

> a totality of experiences through which one learns to live a meaningful, satisfying work life. Within the career education framework, work is conceptualized as a conscious effort aimed at producing benefits for oneself and/or others. Career education provides the opportunity for children to learn, in the least restrictive environment possible, the academic, daily living, personal-social and occupational knowledges and specific vocational skills necessary for attaining their highest levels of economic, personal and social fulfillment. The individual can obtain this fulfillment through work (both paid and unpaid) and in a variety of other social roles and personal life styles, including his/her pursuits as a student, citizen, volunteer, family member and participant in meaningful leisure time activities. (Division on Career Development, 1978, p. 11)

Many professionals are not certain whether vocational education refers to career education, or whether career education is an expanded view of vocational education, or does career education include vocational education and all of the various roles, settings, and events which comprise an individual's life experiences. Because of this confusion, the following distinction between vocational education and career education developed by Brolin and Kokaska (1979) is presented for clarification (see Table 1).

Place Table 1 About Here

Much of the confusion which has developed about career education can be attributed to the attempt by professionals to distinguish between career and vocational education. According to Evans (1975), "the easiest way to describe the relationship between career education and vocational education is to point out that all of the latter is part of the former" (p. 1). Vocational education, as originally conceptualized, was to meet the needs of many public school students who otherwise would not have continued in school because of the elitist college-oriented curriculum. Other factors were that many students had vocational interests met through structured vocational education programs, that industries were in need of skilled craftsmen to meet their manpower needs, and, lastly, our society needed numerous qualified and competent workers in the service occupations.

Comprehensive Career and Vocational Education Program

The ideal delivery plan for career and vocational education would be one where many segments of the school and community were actively involved in the original planning through all phases, including implementation and evaluation. It is apparent that the school personnel involved cannot effectively deliver a realistic or reasonable career and vocational education program only within the confines of the school and books. Students need to have more first-hand experiences with the world of work and the people who work there.

There are several barriers to collaboration among professionals responsible for program development and implementation for handicapped, particularly at the secondary school level. First, special educators generally, because of their academic preparation in colleges and universities, are not exposed to secondary teaching methods and techniques for handicapped. Special educators are required by most states to have had training in elementary methods and techniques in teaching language arts, reading, mathematics, science and social studies. Special educators are then certified to teach in grade levels kindergarten through twelve. Special educators do not become aware of the changes occurring in the secondary level handicapped student. They continue to instruct the same academic subject matter repeatedly expecting little or no gain in maturation, learning experiences or role expectations of the handicapped. Course work continues to stress academics rather than skill and artisan training in specific vocational areas. This latter training could then be teamed with the necessary appropriate academic subject matter needed to help handicapped students succeed in a specific vocational area.

A second consideration is that special educators are not made aware of the many facets of vocational education, nor of the specific program offerings of the vocational core curriculum. They do an injustice to their students. They indicate in the Individualized Educational Program (IEP) that the student should have vocational education and/or instruction. Specificity of the appropriate vocational instruction could assist the handicapped student to prepare for entry into the "world of work" with competencies needed to succeed on a job. Unfortunately, a small number of special educators are aware of this situation.

A third consideration is that attitudes about the handicapped cannot be dismissed. Special educators, vocational educators, secondary-level academic teachers and administrators, and parents have viewed secondary level education for handicapped as an extension of the elementary levels. Far too little attention is paid to the changing needs of the handicapped adolescents and their preparation for the too soon approaching "world of work". Handicapped students not receiving placements in an appropriate vocational education program are doomed to lifestyles of mediocrity or no lifestyles at all which will make them a part of family life, community life or industrial and business life.

Components of a Comprehensive Career and Vocational Education Program

To be effective for the heterogeneous population of handicapped students served in career and vocational education, several options must be available to them. Table 2 contains the range of programmatic options that could be included in a comprehensive program.

Place Table 2 About Here

Within these various settings a range of educational experiences can be provided to the handicapped student. The educational possibilities are only limited by the constraints placed upon the student by their disability, the number and availability of school and community resources, and the amount of involvement encouraged by school, home, and community personnel.

Vocational Education: Available but Elusive for Handicapped Students

The type of vocational training usually provided in the secondary, and postsecondary levels, can be a possible solution to breaking the dependency cycle of handicapped students. Vocational training within the State of Arizona is provided in the following program areas:

1. Agriculture Education
2. Business and Office Education

3. Health Occupations Education
4. Distributive and Marketing Education
5. Home Economics and Consumer Education
6. Technical and Industrial Education
7. Industrial Arts Education

Since vocational training and education occurs on the secondary and postsecondary levels, it gives great hope as an ultimate solution for the handicapped of less dependency upon parents and possibly total independency in the community social and welfare agencies. Vocational training and education hold the key to unlocking the "ports of entry" into the "world of work" for handicapped students as they near the end of their school-age programs. Professional educators, industrialists and manufacturers, as well as political agencies are aware of the potential manpower and human resources of the handicapped available in all communities. They are aware that, if properly trained in vocational programs, handicapped persons are assets and valuable employees.

Most handicapped students, however, are not given the opportunities of vocational training and education by the time they leave the secondary schools. Some reasons for this undereducation or non-education in the vocational programs are as follows.

Vocational training and education are not available to most handicapped because vocational trainers and educators usually do not have the knowledge, techniques or understandings of the handicapping conditions in order to adjust facilities, adapt learning materials and equipment, change negative attitudes to positive ones toward the handicapped, and make programs accessible to handicapped students.

Many vocational personnel agree to make the necessary changes only to find out that the special educator, counselor, parent or guardian, or administrator has convinced the handicapped student to:

a. not take a vocational program;

b. leave secondary school at age 18;

c. not program for vocational training because of insufficient hours in the school-day programming;

d. blame the vocational instructor for being uninformed, insensitive or non-empathetic or negative toward the handicapped;

e. leave the school to find a program more appropriate to the individual's need in another community;

f. enter the world of work after only having had a prevocational program work experience or on-the-job training which is conducted without ever having gotten specific vocational training or education in one of the seven areas formerly mentioned.

The school organization at the secondary level has traditionally been organized along departmental and subject matter lines. This structure mitigates against what was once a prevailing model for serving the handicapped child, namely, the self-contained classroom (Heller, 1980). Elementary special educators, being trained more or less for the self-contained classroom, now find themselves thrust into a departmentalized organization. Many of these teachers are alien to this environment and they usually find themselves ostracized from their departmental faculty peers. They have difficulties in communicating and programming arrangements for their students who are also alien to this strange new environment. Students find difficulty being mainstreamed with their largely mobile competitive peers, and rely upon special educators for solace, protection, guidance, and education. The natural tendency then is to regroup into some type of special student grouping and begin to function in this new environment.

A lack of vocational programming is associated with the orientation of teacher training programs toward the younger handicapped child. Teacher training institutions continually educate the elementary teacher in special education rather than the teacher who will work with the adolescent and/or young adult who is handicapped. This training perpetuates the myth that either the handicapping condition will be remediated by adolescence or that handicapped persons cannot be expected to mature into adulthood. Contributing to this problem is the fact that most states certify special educators in grades K-12 rather than for elementary, secondary, and/or adult education as is the case for regular education certification (Heller, 1980).

Secondary handicapped students are placed in prevocational education environments for most of their high school years. In this environment, handicapped students process from one work station to another learning the specific competencies associated with the work samples. Academic subjects are provided by special educators who are ultimately responsible for students in self-contained or semi-self-contained prevocational programs. Handicapped students are processed out of the prevocational setting to take other academic classes with non-handicapped secondary students, only where they can function in the mainstream of secondary programs. This situation usually continues for the first two or three years of high school.

In the third and usually the final year in high school, handicapped youngsters are placed, by the special educator, into a type of work experience or work study program. In few cases, students are placed in an on-the-job training program. For the final year in high school, handicapped students work part time and attend the prevocational program. Seldom do the handicapped students process through an industrial arts program and/or a vocational program area to obtain basic competencies which are vocationally oriented. At the time of graduation, handicapped students are not prepared with an "entry level skill" but are put out on the job to hopefully fend for themselves in the working world. Where severely handicapped adolescents need follow-through services of a Vocational Rehabilitation nature, the programs and instructors fail because few, if any, special educators know how to make the transition.

Recommendations To Resolve the Elusiveness Problems

Parents of the handicapped, the handicapped themselves, special educators, vocational educators, school administrators, and community business and industrial leaders must be made aware that Vocational Education is to be made available to handicapped students if requested.

Special educators, as well as vocational educators, teaching at the secondary level require in-service training. Upgrading their skills, changing attitudes, familiarizing them with each others' disciplines and sharing mutual concerns will develop communications, interagency agreements and sharing in the educational processes for the students.

Special and vocational educators must be cross-trained in pre-service programs. Special educators need to know the program offerings of vocational education. Vocational educators need to know the idiosyncracies and nomenclatures dealing with the handicapped. Knowing these facts will help both groups of educators to function as a team during the IEP development and its follow through.

Secondary level training of the special educator prior to assignment at that high school level will enable that educator to function better in a departmentally organized institution. Alienation of the teacher will be eliminated. The teacher will be better able to counsel and guide the handicapped student who can then benefit from the total organization.

Special educators seeking to teach on secondary levels, or those chosen to teach in secondary schools, require specific secondary level courses. Such training must be provided by the college or university secondary education departments. Emphasis must be on secondary methods and techniques in reading, language arts, science, mathematics, fine arts, social studies, languages, and vocational education. Appropriate secondary certification should be mandatory through state teacher certification divisions. Unique growth and transitional aspects related to adolescence and adulthood for the handicapped is a "must" in this training program.

Although strides are being made to eliminate discriminatory placement of handicapped students in prevocational programs, more efforts are needed to integrate handicapped students into specific vocational educational programs, courses, and classes. Efforts are needed to provide handicapped students with vocational assessments. Results of these assessments must be incorporated into the IEP and further communicated, in layman's language, to the appropriate vocational educators for follow-through. Special educators usually acting as advocates for their handicapped students must also be ready to assist the vocational instructor in efforts to adapt teaching materials, facilities, equipment and tools in order to make successful the handicapped student's experiences.

Special educators must also assist the work placement coordinators and counselors. They must also assist in making the transition from secondary school to post-secondary and adult programs by providing linkages with Vocational Rehabilitation Services and other agencies when needed.

Special educators, vocational instructors, parents, school administrators and counselors must change negative attitudes about the handicapped to positive attitudes. Handicapped secondary students will become adults requiring work in order to survive in the community. The handicapped will survive, work, pay taxes, get married, rear families, continue their education and grow old. All of our efforts must be directed to these ends or we fail our students.

A considerable amount of attention in recent years has been focused on vocational education for the handicapped. Many of the issues identified in this section are being addressed at the university, state, and local education levels and by professional organizations, but much more attention to these issues is needed.

A Comprehensive Public School Career and Vocational Education Program

This section contains information about one model program presently in operation to serve handicapped students through career, pre-vocational, and vocational education learning experiences. The model to be described is presently in operation in the Mesa Public School District, Mesa, Arizona. The career education portion of the comprehensive program is an outcome of one of the original school-based career education model projects funded through the U.S. Office of Education in the early 1970's. This model project, The Center for Career Development, had several major components that eventually became an integral part of Mesa's present comprehensive program available to handicapped students. The major efforts of the first component, which is curriculum, was directed toward the selection, development, implementation, and refinement of instructional materials. This component had numerous commercial units, kits, and films, some of which were produced with special project funds. Staff assigned to the curriculum component assisted teachers and counselors in utilizing these materials through various promotional efforts such as demonstrations and workshops. Current uses resulting from project activities include career liaison, miniproposals, parent shadow programs, career days and many more career related activities.

The basic function of the second component, the Career Guidance and Placement component, is to provide the leadership necessary to help school counselors evaluate guidance activities, to integrate these activities into new programs, and to build counselor competencies geared to more intensive involvement with all students in career development. The placement component within the guidance program is concerned with the transition of each student from school to society. A direct placement service is provided to assist those students needing help in identifying, selecting, and adjusting to career choices.

The Community Resource Service (CRS), a third basic component, provides for observation tours, career speakers, tele-lectures, and videotaped interviews that are custom-tailored to meet the requirements of a particular class. The CRS also arranges for all work exposure/experiences for students. As a part of this service, a formal volunteer program is in operation. These community experiences serve to enrich the basic instructional program and demonstrate that what is being learned in the classroom does have practical application outside the walls of the school building.

The Career Education approach to teaching students requires some new knowledge, attitudes, and skills on the part of all instructional and supportive personnel. The staff development component, the fourth one, orients participants to the meaning and mission of Career Education; focuses on the nature of career development in youth; emphasizes the relationship of schools and community in Career Education efforts; is designed to prepare staff members and community persons to utilize or participate in specific Career Education instructional strategies.

The major objective of the fifth component, evaluation, is assistance in assessing the extent to which a set of program activities delivers the objectives of a given program. Community surveys, teacher-structured interviews, resource usage data, individual service, and product evaluation are all parts of this component.

In addition to the career education program, a structured series of pre-vocational and vocational program learning experiences is available to handicapped students. These experiences provide opportunities for the students to acquire specific vocational skills within a career ladder; to better understand themselves; to discover their potential to solve problems and make decisions; to become independent, and to interact appropriately with others.

The following flow chart, Figure 1, illustrates pathways that handicapped students may choose to pursue based upon their interests and abilities. The ultimate goal of this program is to provide the students with skills and reasoning capabilities so that they may become self-sufficient and productive within their respective communities. This can be an achievable goal for handicapped students if they are provided with appropriate educational opportunities and support services.

Place Figure 1 About Here

A flow chart does not accurately convey the dynamic interactions that occur in the ecological system prescribed in Figure 1; therefore, a brief description of several key program components presented in the flow chart follows.

Guidance

The Mesa Public School's Guidance Department staff and special education teachers provide the following materials and any other relevant career education information to the handicapped student.

Seventh Grade:	*All About You* and the Student Planning Folder
Eighth Grade:	*Decision Unit* and Student Planning Form, Interest Inventory, and Four-Year Plan
Ninth Grade:	Four-Year Plan Reviewed
Tenth Grade:	Four-Year Plan Reviewed and Further Career Resource Center Activities
Eleventh Grade:	*Career Planning Workshop* and Preliminary Post-Secondary Plan
Twelfth Grade:	Final Post-Secondary Plan

Vocational Evaluation Process

The vocational evaluation process is a viable and valuable tool for advisor, counselor, teacher, and agencies outside of the school district now serving the student. Likewise, the student-evaluee can gain many benefits that are not tangible, such as greater insight and self-understanding. More tangible benefits of vocational evaluation are that it:

1. Pinpoints aptitudes, interests, attitudes, and behavior through work-directed activity in a variety of work areas.
2. Minimizes the risk of misplacing the student in learning or work environments.
3. Assists in identifying appropriate job goals.
4. Identifies work readiness.
5. Assists in development of plans to meet present and future needs.

As soon as the student is sent to the Vocational Evaluation Unit, the student is provided with a simple explanation of the evaluation process. Prior to scheduling, information has been obtained about the student such as: psychological, medical, IEP reports, plus transcript and other file information which may be useful. Students are asked about vocational interests. They have an initial intake interview, academic screening tests (if not provided by other sources on a recent test basis), and are assessed for color discrimination, vision, and dexterity. Exploration of aptitude and achievement skills is then initiated. The evaluation is a multi-day process in which the remaining evaluation period consists of working at different work sample stations. Upon completion of the evaluation, a comprehensive Vocational Evaluation Report is completed on the individual.

Pre-Occupational Exploration (POE)

This course usually offered in Grades 10-12 is part of the Pre-Employment Preparation (PEP) Program. It is designed to help students explore occupational and career areas that are available within the community. Students are given the opportunity to investigate their personal work-related abilities and to complete various interest surveys. The student is counseled to take this course prior to enrollment in vocational coursework.

Vocational Instruction

See Figure 2, Mesa Central Vocational Technical Center Class Schedule for 1981-1982. This schedule includes the General Service Trades as well as the Vocational Helper Categories within the vocational courses. Mesa Central Vocational Technical Center (MCVTC) is a vocational center comprised of students who come from the district comprehensive high schools as well as neighboring school districts. Handicapped students receive the prerequisites for the courses at their comprehensive high school.

Place Figure 2 About Here

Vocational Resource Support

The Vocational Resource Support (VRS) Staff monitor and document special education student progress in vocational classes (absences, tardiness, academic and vocational progress, personal needs, and classroom behavior) at regular intervals and communicate this information to the home school special education teacher. In addition to this, the VRS Staff recommend courses and/or schedule changes as well as assist vocational instructors with alternative curriculum approaches.

The student progress information is documented at least once each nine-week period. The key element to the success of the VRS has been the direct communication linkage to academic and vocational instructors, students, parents, and special education teachers.

PEP On-The-Job Training (OJT)

This is a senior-level program offered under Pre-Employment Preparation. This vocational course provides job-readiness experiences in diversified occupations. The student is in the classroom one period per day and then spends an average of three hours or more per day on the job training, receiving high school credit, and, in most cases, wages. Participation in the OJT Club is part of the related class instruction. Follow-up studies of OJT Program graduates are conducted yearly which provide feedback (evaluation) data for use in program improvement.

The most important element which binds together all course offerings and related skills is effective communication among members of the multi-disciplinary team when determining the most appropriate placement and program of studies for the handicapped student. The components presented in Figure 1 and the brief description of these components which followed are only a cursory summation of what is being accomplished in the Mesa Public School District to help their handicapped students reach their goal of independence.

Summary

The authors have described the components needed to ensure an effective comprehensive career and vocational education program for handicapped students, and have also provided a description of one effective model program presently operational in the public schools. Several important issues related to the placement of handicapped students in vocational education were addressed and recommendations to ameliorate the problem areas identified were presented. The reader should now have a better understanding of career and vocational education for the handicapped.

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Table 1

Some Differences Between Career Education and Vocational Education

career education	vocational education
Focuses on paid and unpaid work (e.g., volunteer, leisure and recreation, homemaking)	Focuses on paid work (although unpaid work is referred to in the Vocational Education Amendments)
Emphasizes general career skills	Emphasizes occupational preparation
Promotes cognitive, affective, and psychomotor skill development	Promotes psychomotor skills for entry into occupational society
Meets the needs of the learners	Meets the needs of the labor market
Is a system-wide effort, not specific courses or an instructional program	Is defined in terms of courses and is an instructional program
Is taught by all educators	Is generally taught by vocational educators
Focuses on all instructional programs at all levels of education	Focuses on the secondary and post-secondary levels
Involves family, agencies, and business/industry	Involves primarily business/industry

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Table 2 A Comprehensive Career and Vocational Education Model

Grade Level	General Education	Career Education	Vocational Education	Special Education	Vocational Rehabilitation
Post-Secondary	Adult Continuing Education University-College Community College Technical School-College Apprenticeship Programs Employment Program (CETA/ YEDPA) Career Resource Centers	Adult Continuing Education University-College Community College Technical School-College Apprenticeship Programs Employment Program (CETA/ YEDPA) Career Resource Centers	Adult Continuing Education University-College Community College Technical School-College Apprenticeship Programs Employment Program (CETA/ YEDPA) Career Resource Centers Mobile Occupational Education Unit	Adult Continuing Education University-College Community College Technical School-College Apprenticeship Programs Employment Program (CETA/ YEDPA) Career Resource Centers Mobile Occupational Education Unit Vocational Rehabilitation Facility	Adult Continuing Education University-College Community College Technical School-College Apprenticeship Programs Vocational Evaluation Center Vocational Rehabilitation Facility Agency or Association Workshop
Secondary 9-12	Academic Subjects in General-College Preparatory Industrial Arts Extra-Curricular Activities Career Resource Centers Employment Program (CETA/ YEDPA)	Career Preparation 11-12 Career Orientation 9-10 Employment Program (CETA/ YEDPA)	Apprenticeship Programs Mobile Occupational Education Unit Cooperative Vocational Education Vocational Education Centers Vocational Education Special Needs Occupational Work Experience Occupational Exploration Occupational Awareness Extra-Curricular Activities Employment Program (CETA/ YEDPA)	Vocational Education Special Needs Mobile Occupational Education Unit Vocational Evaluation Work-Study (Community/School) Industrial Arts Prevocational Skills Special Subjects Basic Skill Subjects Extra-Curricular Activities Employment Program (CETA/ YEDPA)	Vocational Rehabilitation Facility Agency or Association Workshops Vocational Evaluation Cooperative Agreement for Clients 16 Years +
Junior High	Academic Subjects Industrial Arts Extra-Curricular Activities	Career Exploration		Prevocational Skills In-School Work Special Subjects Basic Skill Subjects Extra-Curricular Activities	
Elementary K-6	Academic Subjects Basic Skill Subjects Extra-Curricular Activities	Career Awareness		Prevocational Skills Special Subjects Basic Skill Subjects Extra-Curricular Activities	

Figure 1 CAREER/PRE-VOCATIONAL/VOCATIONAL OPPORTUNITIES FOR THE HANDICAPPED

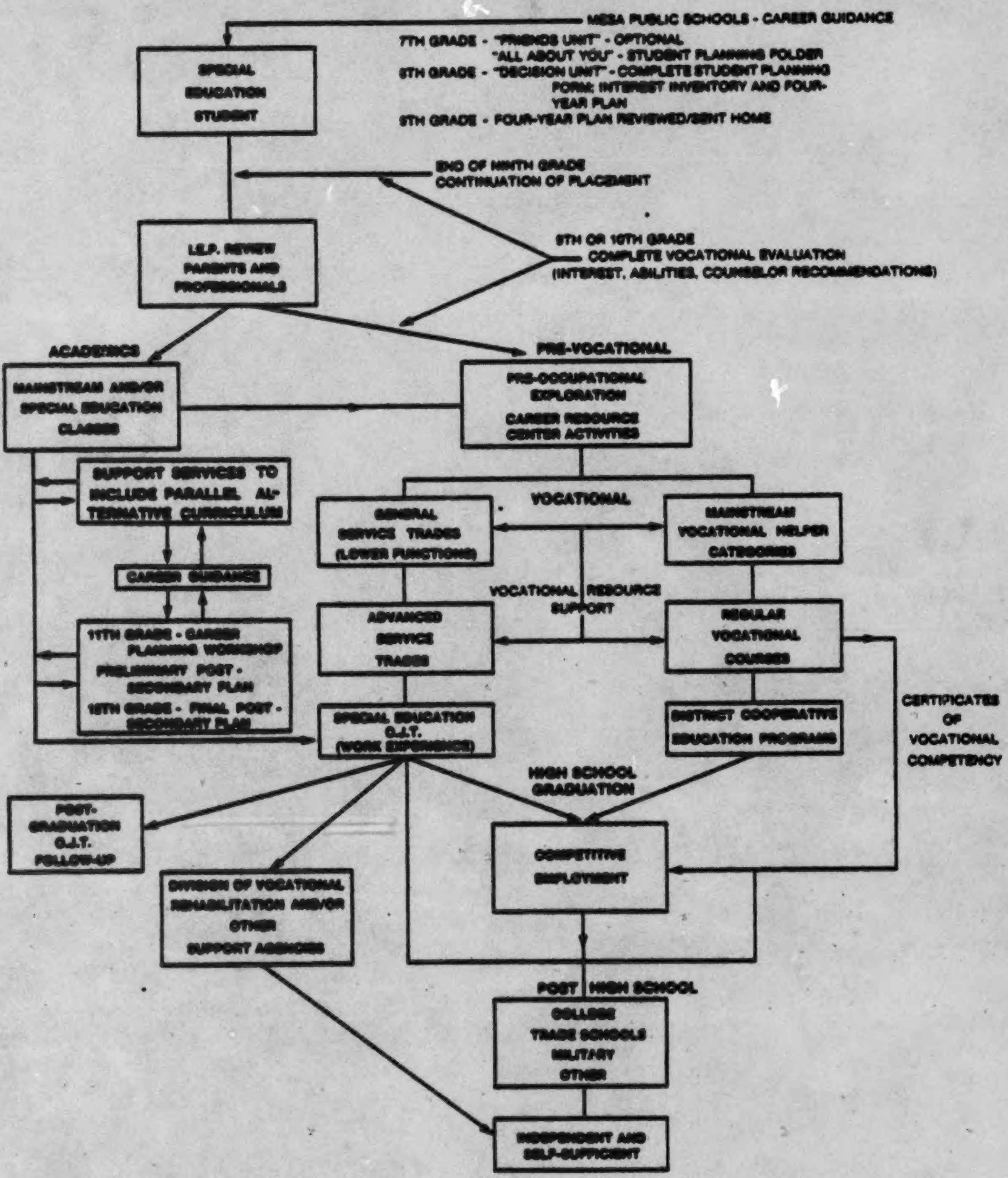
MESA PUBLIC SCHOOLS - CAREER GUIDANCE
7TH GRADE - "FRIENDS UNIT" - OPTIONAL
"ALL ABOUT YOU" - STUDENT PLANNING FOLDER
8TH GRADE - "DECISION UNIT" - COMPLETE STUDENT PLANNING FORM: INTEREST INVENTORY AND FOUR-YEAR PLAN
9TH GRADE - FOUR-YEAR PLAN REVIEWED/SENT HOME
SPECIAL EDUCATION STUDENT
END OF NINTH GRADE CONTINUATION OF PLACEMENT
9TH OR 10TH GRADE COMPLETE VOCATIONAL EVALUATION (INTEREST, ABILITIES, COUNSELOR RECOMMENDATIONS)
I.E.P. REVIEW PARENTS AND PROFESSIONALS
ACADEMICS
MAINSTREAM AND/OR SPECIAL EDUCATION CLASSES
PRE-VOCATIONAL
PRE-OCCUPATIONAL EXPLORATION
CAREER RESOURCE CENTER ACTIVITIES
SUPPORT SERVICES TO INCLUDE PARALLEL ALTERNATIVE CURRICULUM
CAREER GUIDANCE
11TH GRADE - CAREER PLANNING WORKSHOP
PRELIMINARY POST-SECONDARY PLAN
12TH GRADE - FINAL POST-SECONDARY PLAN
VOCATIONAL
GENERAL SERVICE TRADES (LOWER FUNCTIONS)
MAINSTREAM VOCATIONAL HELPER CATEGORIES
VOCATIONAL RESOURCE SUPPORT
ADVANCED SERVICE TRADES
REGULAR VOCATIONAL COURSES
SPECIAL EDUCATION O.J.T. (WORK EXPERIENCE)
DISTRICT COOPERATIVE EDUCATION PROGRAMS
CERTIFICATES OF VOCATIONAL COMPETENCY
HIGH SCHOOL GRADUATION
POST-GRADUATION O.J.T. FOLLOW-UP
DIVISION OF VOCATIONAL REHABILITATION AND/OR OTHER SUPPORT AGENCIES
COMPETITIVE EMPLOYMENT
POST HIGH SCHOOL
COLLEGE
TRADE SCHOOLS
MILITARY
OTHER
INDEPENDENT AND SELF-SUFFICIENT

Figure 2

MESA CENTRAL VOCATIONAL TECHNICAL CENTER
CLASS SCHEDULE
1981-82

		Rm. No.	A Per 7:05-8:00	1st Per 8:05-9:00	2nd Per 9:05-9:55	3rd Per 10:05-10:55+	4th Per 11:00-11:50	5th Per 11:55-12:45	6th Per 12:50-1:40	7th Per 1:45-2:35 +
1056	Abrams, Al	13		Vocational Evaluation				Vocational Evaluation		
1055	Adair, Charles	420 434		Small Gas Engines I TI31 *Small Gas Engines II TI32				Small Gas Engines I TI31 *Small Gas Engines II TI32		
1053	Bartle, Glen	400		General Vocational Construction Construction Helper TI50, TI51 *Carpentry TI52				General Vocational Construction Construction Helper TI50, TI51 *General Vocational Construction Construction Helper TI50, TI51		
2801	Beck, Edda	5		Math and Reading Resource	Math for Trades MA24 Ind.Study in Math MA99	Fund.Eng. I EN31 Fund.Eng II EN32 Appl.Reading RD30		Math and Reading Resource	Math and Reading Resource	Fund.Eng. I EN31 Fund.Eng II EN32 Appl.Reading RD30
2941	Cuculic, Sharon	11 15	Starting & Manag. Own Bus. BE84	Advanced Office Skills Office Helper BE78, BE80 *Advanced Office Skills Office Helper Advanced Office Procedures BE78, BE80, BE82				Typ 1,A-B BE28, 29 Typ 2,A-B BE30, 31 Typ 3,A-B BE32, 33 Bus.Skills Cluster BE77	Starting & Manag. Own Bus. BE84 *Starting & Manag. Own Bus. BE84	
2805	Dressler, Don	410 Gym	*Rec. P.E. PE35	Cabinetmaking Cabinet Shop Helper TI58, TI59				Rec. P.E. PE35	Rec. P.E. PE35	

* - Second Semester

+ - Vocational Classes: A.M. - 8:05 - 10:35
P.M. -11:55 - 2:25

Figure 2 continued

		Rm. No.	A Per 7:05-8:00	1st Per 8:05-9:00	2nd Per 9:05-9:55	3rd Per 10:05-10:55+	4th Per 11:00-11:50	5th Per 11:55-12:45	6th Per 12:50-1:40	7th Per 1:45-2:35+
1044	Duke, Fred	424 430		General Vocational Auto Mechanic's Helper TI38, TI39 *Auto Tune-up/Emissions Auto Chassis/Powertrain TI40, TI41				Auto Tune-up/Emissions Auto Chassis/Powertrain TI40, TI41 *General Vocational Auto Mechanic's Helper TI38, TI39		
1043	Engle, Jean	401 202		Career Child Care HE40			D.C.E. Rel. Class TI91	Career Science SC31		
			D.C.E. TI91	D.C.E. TI91	D.C.E. TI91	D.C.E. TI91		D.C.E. TI91	D.C.E. TI91	D.C.E. TI91
1037	Griffith, Mary Ann	Rest				Restaurant/Catering I & II Restaurant Assistant HE43, HE44, HE45				
1073	Brooks, Carlton			Restaurant/Catering I & II Restaurant Assistant HE43, HE44, HE45						
	Haney, Kevin						Restaurant/Catering I & II Restaurant Assistant HE43, HE44, HE45			
1035	Hennigan, Leonard	300 424		Arc Welding TI44 Gas Welding and Cutting TI45				General Vocational Auto Mechanic's Helper TI38, TI39 Rm. 424		
				Weld I,II IA71,IA72	Weld I,II IA71,IA72	Weld I,II IA71,IA72				
				*Arc Welding TI44 Gas Welding and Cutting TI45				*Arc Welding TI44 Gas Welding and Cutting TI45		
				Weld I,II IA71,IA72	Weld I,II IA71,IA72	Weld I,II IA71,IA72		Weld I,II IA71,IA72	Weld I,II IA71,IA72	Weld I,II IA71,IA72

* - Second Semester

+ - Vocational Classes: A.M. - 8:05 - 10:35
P.M. - 11:55 - 2:25

Figure 2 continued

	Rm. No.	A Per 7:05-8:00	1st Per 8:05-9:00	2nd Per 9:05-9:55	3rd Per 10:05-10:55+	4th Per 11:00-11:50	5th Per 11:55-12:45	6th Per 12:50-1:40	7th Per 1:45-2:35 +
1030 Hinrichs, Joyce	2		Vocational Resource		LDR/EH PP70-PP92		Vocational Resource		
1020 Lisoubee, Ned	414		Auto & Furn. Upholstery I & II TI33, TI34				Auto & Furn. Upholstery I & II TI33, TI34		
1224 Louis, John	416 418 436 438		Auto Body & Fender I & II TI35, TI36 Auto Body Helper TI37				Auto Body & Fender I TI35 Auto Body Helper TI37		
1133 Malling, Betty	25 26		Health Career Core TI70 - - - - - - - - - - - - *Health Career Core TI70				Nurse's Assistant TI73 Health Care Aide TI74		
1017 Mierkey, Patrick	105							Music Cluster MU34	Jazz/Rock Ensemble MU63
1014 Post, Alma	401		Parenting Career Child Care Child Care Assistant HE40, HE41, HE42				Parenting Career Child Care Child Care Assistant HE40, HE41, HE42		
1009 Reichard, Robert	6		Lit.Exp. EN51 Am. Lit. EN57 Eng.Lit. EN60 - - - - *Prin. of Eng I & II EN33,EN34	Az.Hist. SS25 Am.Hist-1 SS31 Am.Hist-2 SS33 Am.Gov't. SS51 - - - - *Az.Hist. SS25 Am.Hist-1 SS31 Am.Hist-2 SS33 Am.Gov't. SS51	Az.Hist. SS25 Am.Hist-1 SS31 Am.Hist-2 SS33 Am.Gov't. SS51 - - - - *Az.Hist. SS25 Am.Hist-1 SS31 Am.Hist-2 SS33 Am.Gov't. SS51		Az.Hist. SS25 Am.Hist-1 SS31 Am.Hist-2 SS33 Am.Gov't. SS51 - - - - *Az.Hist. SS25 Am.Hist-1 SS31 Am.Hist-2 SS33 Am.Gov't. SS51		Prin. of Eng I & II EN33, EN34 - - - - - *Lit.Exp. EN51 Am.Lit. EN57 Eng.Lit. EN60

* - Second Semester

+ - Vocational Classes: A.M. - 8:05 - 10:35
P.M. - 11:55 - 2:25

Figure 2 continued

	Rm. No.	A Per 7:05-8:00	1st Per 8:05-9:00	2nd Per 9:05-9:55	3rd Per 10:05-10:55+	4th Per 11:00-11:50	5th Per 11:55-12:45	6th Per 12:50-1:40	7th Per 1:45-2:35+
1006 Scott, Harry	402		Air Conditioning TI47				General Vocational Construction Construction Helper TI50, TI51 Appliance Repair TI46 *Appliance Repair TI46 Electrical Trades & Plumbing TI54, TI55		
1003 Soricone, Bernie	406 408		Graphic Arts I & II TI61, TI62 Printer's Helper TI63				Graphic Arts I TI61 Printer's Helper TI63		
1001 Stewart, Freeman	422 434		Auto Engine Overhaul I TI42 *Auto Engine Overhaul II TI43				Auto Engine Overhaul I & II TI42, TI43 *Auto Engine Overhaul I TI42		
1007 Thomas, Sue	1		Vocational Resource				Vocational Resource		LD/EH PP70-PP92
3158 Vaughan, Robert	302		General Service Trades TI49				General Service Trades TI49		
Murton, Mike (A.M.) Dutcher, Larry (P.M.)	10		Vocational Data Processing BE45				Vocational Data Processing BE45		

* - Second Semester

+ - Vocational Classes: A.M. - 8:05 - 10:35
P.M. - 11:55 - 2:25

Figure 2

STUDENT ASSISTANT PROGRAM

SA61	Student Assistant

WORK EXPERIENCE PROGRAM

WE61	Work Experience
WE90	Career Exploration

NC50	Study Hall
NC60	Lunch
NC90	Released Time

PERSONALITY ATTITUDE ADJUSTMENT CLASS

PP70	P.A.A.C. English
PP71	P.A.A.C. Mathematics
PP72	P.A.A.C. Individual Instruction
PP73	P.A.A.C. Arizona History
PP74	P.A.A.C. American History 1
PP75	P.A.A.C. American History 2
PP76	P.A.A.C. American Government
PP77	P.A.A.C. Free Enterprise
PP78	P.A.A.C. Literature
PP80	P.A.A.C. Science
PP81	P.A.A.C. Health

LEARNING DISABILITIES

PP82	Resource Mathematics
PP83	Resource English
PP84	Resource Arizona History
PP85	Resource American History 1
PP86	Resource American History 2
PP87	Resource American Government
PP88	Resource Free Enterprise
PP89	Resource Individual Instruction
PP90	Resource Literature
PP91	Resource Science
PP92	Resource Health

AUXILIARY TEACHER NUMBERS

2802	Clement, Pat
2666	Heller, Linda
1022	Kauss, Michael
2722	Luca, Theresa
2723	Richins, Duane
0995	Vaughan, Keith

Curriculum and Continuum:
The Two "C's" Leading to Gainful Employment
# of the Handicapped

Barbara Day
South Texas High School, Edinburg, Texas

Running head: Curriculum and Continuum

Abstract

Programs that provide vocational training to handicapped students need to offer a wide range of training options with curriculum to support those options. This paper will describe South Texas High School, a model program in the field of vocational education for handicapped students. Prevocational training, sheltered workshop, vocational education for the handicapped (VEH) clusters, on-site training and on-the-job training programs will be described as well as an overview of curriculum from each area will be presented.

Curriculum and Continuum-The Two "C's"
Leading to Gainful Employment of the Handicapped

Recent trends in legislation to assure viable vocational and career education programming for handicapped young adults have resulted in increased national attention to those who provide these services. The Vocational Education Amendments of 1976, the Education for all Handicapped Children Act of 1975, Section 503 and 504 of the Rehabilitation Act of 1973 and the Comprehensive Employment and Train- Act of 1978 all address themselves to the issue of appropriate vocational training leading to productive employment.

It has become the job of those agencies who serve handicapped individuals to determine how to provide these services. For years, career education advocates have ascertained that a well rounded curriculum includes more than just specific skills training. Such things as daily living skills, personal-social skills and occupational guidance are all vital if we are to achieve the goal of "appropriate vocational training" (Brolin & Kakoska, 1979).

Unfortunately, many schools that offer programs to train the handicapped are not well-rounded. The vocational educators within a given school system often leave all phases of training to "those special education people". As a result, programs are often lopsided, some stressing daily living skills without specific vocational skills training and others training students for jobs without teaching them the social skills necessary to keep a job once they find one. Programs to serve specific populations are often noticeably absent or offer insufficient training. Webster (1981) reports that the availability of alternative programs designed to meet the needs of the emotionally disturbed is quite limited. Even schools which have programs for most handicapped students find that too often they are trying to make the student fit the program rather than the program fit the student. A successful vocational teacher of the handicapped recently reported:

> I do not know about the other schools, but having thirteen VEH [Vocational Education for the Handicapped] programs in El Paso, we do have a problem with placement of these students. Too many times we are trying to put a round student into a square hole. We must consider not only the student's desire for a particular program, but his or her ability to function. . . . If you put students in a particular program and they cannot learn or function, then you have restricted their environment. You must be prepared to do something else (Hill, 1980).

As educators we often measure our success in terms of short term job placement. We find a specific job for a student and train in the specific skills necessary to do that particular task. When six months later the student is earning minimum wage the parents and teachers are thrilled. This student is a success! Is he now? Are we not guilty of what Olshansky (1969) talks about when he warns that serious misperceptions about occupational preferences have interfered with job placement? Are we not assuming that our "successful" student will remain on that job for the rest of his life? Most people do not work at one job or even in one field for their entire working career, but aren't we, in special education, training them with the expectations that they will do just that?

In this age of technology, we are doing our students a serious disservice when we train them for one very specific job. Many of our handicapped students find changes extremely difficult, yet we do little to prepare them to make changes. The disruption that results from automation necessitates flexibility and job mobility. Individuals must be properly trained to change work roles. It is imperative that knowledge and skills related to these abilities be included in the school curriculum (Weisenstein, 1979).

When planning the curriculum, the type and severity of the handicap need to be considered. As a rule of thumb, the more severe the handicap the more specifically training should point toward an already identified job (Kok, 1980). Haring (1977) states that when dealing with a severely handicapped population

> each client's training should be a direct function of the requirements of the employment or training situation projected for his/her next placement. If a client is to be placed in a community sheltered workshop, prevocational training should focus on those areas of skills and work behaviors regarded as essential for entry into that workshop.

It is the combination of an extensive continuum of vocational options leading from general to extremely specific training curriculum that provides a "total educational program". This article presents a program description of the continuum of vocational options available to students at South Texas High School. Inherent in this program description is a discussion of the curriculum offered to correspond with the vocational options. This curriculum is unique in that it is all encompassing. Students do not spend three hours per day in their vocational class and then return to their English and math classes for Shakespeare and geometry but rather all academic classes are clustered around the particular vocational class in which the student is receiving training. This total emersion in all phases of training is what the two C's--curriculum and continuum--are all about.

South Texas High School Program

School description. South Texas High School is a rehabilitation school district created to serve handicapped youth and "non-handicapped scholastics" between the ages of 14 and 21. There are two high schools in a three county area. One high school has a residential facility to serve students whose primary handicap is emotional disturbance.

Students are referred to South Texas High School from their schools of residence. They generally are moderately to severely handicapped, have mild or no handicap, or are serious behavior problems. The combined enrollment of both campuses is approximately 400 students with both campuses having Training Centers with sheltered workshops to serve the moderately/severely/profoundly handicapped. The Training Center students number approximately 125 with the remaining population (called "regular program" for lack of a better name) being mildly retarded, learning disabled, emotionally disturbed, socially maladjusted, orthopedically handicapped or multiply handicapped.

With the exception of the 32 students who live in the residential facility, all 400 students are bused in daily.

Continuum

Evaluation. The South Texas High School Continuum of Vocational options begins with a vocational evaluation prior to placement in a specific program. Since it is not the intent of this paper to discuss vocational evaluation, let it suffice to say that all students are thoroughly evaluated upon entrance to South Texas High School.

Prevocational training. The most basic classes are prevocational in nature. The majority of the students who begin here are severely or profoundly handicapped. The emphasis is on prevocational skills such as matching objects by size, shape and color. Since effective means of communication of personal needs is often lacking, students are taught alternate means of communication such as Bliss symbols, sign language or even simply pointing. Self-help skills are emphasized with the goal of as much independent functioning as possible for each individual. Undesirable behaviors such as masturbation and head banging are extinguished when possible by teaching behaviors incompatible with the undesirable ones. On task time is increased through the use of reinforcers such as food and verbal praise.

Sheltered workshop. Most moderately to severely handicapped students receive their initial vocational training in the sheltered workshop. Students are scheduled into the workshop for one period per day, then, as on task time increases, they work for two and eventually three periods per day. In some unusual cases, students may spend the entire day at their work stations.

Work varies according to available contracts but there are three contracts that have been on going. These are: rebuilding crates for the Coca-Cola Company, cutting sleeves for plants for shipping, and stripping brass from telephone circuits. A variety of fine and gross motor skills as well as academic skills are necessary to perform these tasks and students work at one station until they meet specified criterion and then move to the next station. All tasks are analyzed to facilitate instruction and data taking. Prior to consideration for stepping up to the next phase of instruction students should ultimately be able to perform 90% of all workshop tasks.

Workshop students receive payment for their work on a piecemeal basis. A weekly check is given each student who then goes to the bank with the teacher in order to cash his check. Students are frequently taken shopping so that their purchases may be supervised while they practice using money wisely.

VEH clusters. Higher functioning students attend VEH (Vocational Education for the Handicapped) classes for two or four periods per day. Students are given the opportunity to choose their cluster with all males and females being encouraged to train in non-traditional occupations if they so desire.

There are ten VEH classes offered. The content of these classes is determined by the Texas Education Agency and the course content must comply with Texas Education Agency guidelines if money is to be received for that program.

Curriculum guides have been written specifically for each cluster, keeping in mind South Texas High School's unique population. The clusters are: Agriculture, Building Maintenance, Cabinetmaking, Electrical Trades, Food Service, General Mechanics, Health and Home Care (nurse's aide training), House Painting, Horticulture, and Commercial Sewing.

On-site training. Lower level students who have received some basic training in a VEH cluster and students who have met criteria in all areas of the sheltered workshop may enter the On-Site Training Program.

These students are placed in small groups in the community at job sites for either a half or whole day. Supervision is provided at all times by a member of the high school staff. Tasks are analyzed by the supervisor so that training can be provided in any problem area. These sites are invaluable to the school and provide visibility for our training program. Both the employer and employees benefit in that the employer does not need to spend large amounts of time teaching a task and supervising students but still receives the benefit of the work done by them. Employees are able to learn at their own rate while still being paid in order that they may become prepared for competitive employment. Students are generally placed in this program for two years before they are ready to work on their own.

On-job training. While in the final phase of VEH training, students begin working with a vocational adjustment coordinator (VAC). After meeting with a student's teachers and the student to determine skill level and specific interests, the VAC attempts to locate a training site for the student in the community. Once the student is placed on the job it is up to the employer to teach the student the work that is to be performed. The VAC offers support and counseling and helps coordinate the program and iron out any difficulties. Weekly evaluations of the student's work are completed by the employer to assist the VAC in his work. When a student has completed six months of successful competitive employment he is eligible for graduation.

Curriculum

Social skills. It is the basic philosophy of South Texas High School that all students need to learn to be responsible for their own behavior. Since the population of the school is composed primarily of handicapped students with behavior problems, this is essential if students are ever going to succeed on a job.

All but the lowest level students participate in our behavior management program. This program has as its goal three behaviors that are essential to gainful employment: on time, on task, and compliance with directions. Students who demonstrate these behaviors are rewarded on a daily and semi-monthly basis. Those who are unable to meet criteria are not punished but rather do not receive privileges that other students do.

This system has been quite successful in teaching appropriate job behavior. With initial assistance, even moderately retarded students can learn to participate in a response cost program such as this one.

Academics. Each academic area has a curriculum guide written by South Texas High School staff. Course content is unusual since every subject deals with what the student needs to know on a job and to get along in the world rather than the traditional approach used by many high schools.

English teachers teach vocabulary words that originate in the students' vocational classes; they learn to read patterns and auto parts manuals rather than English literature books.

Math teachers deal with measurement and teach students about checking and savings accounts as well as how to secure loans.

This concept of clustering the students academics and electives around his vocational class keeps student interest alive since they can see the relevance of what they are learning to the job they hope to hold. Students who never cared if they learned to read are suddenly motivated to read well enough to pass their drivers license exam or to read a car tune-up guide.

Since the incidence of students with emotional disturbance or who are socially maladjusted is high (40% of the regular program), the curriculum must be flexible enough to allow for students with behavior problems but who are not seriously academically handicapped. For this reason, "advanced" classes are offered in English, math, social studies, and science. The content of these courses is more traditional, however, basic skills relating to employment are still taught.

Vocational. Each vocational area and cluster within an area has a curriculum guide that was written by the vocational teachers. Students' progress toward specific goals is obtained by reaching a number of short term objectives. At any given time a vocational teacher can list specifically what job skills the student has in this vocational area and what remains to be learned.

Summary

South Texas High School offers a complete vocational program to handicapped adolescents. Each student participates in a program which endeavors to teach him the social, academic and vocational skills which he needs to assume in society the most productive role possible.

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INDEPENDENT LIVING - THE CONCEPT, THE MOVEMENT, AND PROGRAM MODELS

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Independent Living - The Concept, The Movement, and Program Models

Independent living, as it relates to severely-disabled people, means making decisions which affect one's own life and being active in the mainstream of community life. Goals of independence for severely-disabled people are potentially the same as those for anyone else. They may include having a family, owning a home, having a good education and a good job, having nice clothes, traveling, and having good friends. However, severely-disabled people are often prevented from reaching these goals by physical, psychological, social, and environmental barriers. Because their abilities are limited in some, possibly unimportant ways, disabled people are often treated like dependent children. They are nursed, sheltered, fed, clothed, and generally prevented from making decisions, assuming responsibility, or taking risks.

The implicit theory behind independent living is that, given appropriate supportive services, accessible environments, and the information and skills necessary to benefit from them, severely disabled people can exercise self-determination and participate in all aspects of society. The theory is rather simply stated, but the concept is not particularly complicated.

For many years, some severely handicapped people have lived comparatively independent lives by finding or making barrier-free homes or apartments and by securing attendant care, transportation, employment, and other supportive services on an individualized basis. Sometimes these arrangements were very imaginative, sometimes they are fortuitous, and most often they were circumstantial.

The Independent Living Movement

In spite of these self-styled arrangements, programmatic and broad-scale efforts to facilitate independent living were stifled by attitudes, restrictive statutes and regulations. In the early 1970's, small groups of disabled people banded together to break away from such artificial and forced dependency. Using peer support to overcome basic insecurities and to generate enthusiasm and ideas, these groups attacked the traditional barriers to independence and developed community-based service-delivery systems as alternatives to established institutional models. As members of these groups became more independent, other severely-disabled people who were watching them and hearing of their successes began to make requests--indeed, demands--for a similar opportunity for independence.

A group consciousness among those individuals and groups who were ardently seeking independence emerged, and the independent living movement was born. This movement has been characterized by a great amount of consumer involvement. This is probably due to the fact that it was spawned during a period--at the close of the Vietman era--when people all over America were beginning to seek more control over decisions which affected their lives. The movement has also been associated with deinstitutionalization, expanding non-institutional residential alternatives for severely-disabled people, and normalization.

Independent Living Programs

As more people advocated for independent living, and as the need for independent living services grew, formalized programs designed to facilitate independent lifestyles were established in some communities. In 1974, four such programs existed, and by 1981, there were more than 100 independent living programs. In addition to this dramatic growth in the number of programs, the country's total investment in independent living services increased from about one-half million dollars on 1974 to more than twenty million dollars in 1981. Perhaps most importantly of all, the number of disabled persons served by independent living programs grew from approximately 500 in 1974 to more than 15,000 in 1981. While the majority of those served in these programs are primarily physically disabled, all disabilities are represented in the population.

Utilizing substantive input from persons involved in the independent living movement from all over the United States, the Independent Living Research Utilization Project at The Institute for Rehabilitation and Research in Houston has defined an independent living program as "a community-based program having substantial consumer involvement that provides directly, or coordinates indirectly through referral, those services necessary to assist severely-disabled individuals to increase self-determination and to minimize unnecessary dependence on others." The definition goes on to state that services provided or coordinated by an independent living program include "housing, attendant care, readers and/or interpreters, and information about goods and services relevant to independent living. Other services that may either be provided or coordinated by an independent living program include transportation, peer counseling, advocacy or political action, independent living skills training, equipment maintenance and repair, and social or recreational services" (Frieden, Richards, Cole, and Bailey, 1979).

By examining this definition closely, one may conclude that there are three major elements which constitute the substance of the definition. They are: community-based, consumer involvement, and service provision. Community-based implies that the programs are designed to serve the needs of a population in one particular community as opposed to a region, state, or nation. Community-based, as it applies to this definition, also means that programs are rooted in the community which they serve to the extent that they are dependent upon the people and resources in that community for direction and subsistence.

Consumer involvement implies that these programs depend upon people who receive their services, people who have in the past received services, or people who may at some time in the future receive services, to provide leadership and assistance by serving on boards of directors, advisory committees, and by working as paid or volunteer staff persons in the program. Consumer involvement in this case ensures that programs do not lose touch with the needs of their clients, and it means that they will maintain a sort of grassroots, down-to-earth character and richness.

Service provision indicates that these programs are not simply social clubs or political action groups. They are in the business of enabling severely-disabled people to live comparatively independent lives in their own communities by providing whatever services are necessary for this to happen. In many instances these services relate to basic daily living needs like housing, transportation, and attendant care. However, in some cases these services related to more occupationally-oriented goals like education and work.

Types of Independent Living Programs

Three basic types of independent living programs have been identified (Frieden, 1980). These are the independent living center, the independent living residential program, and the independent living transitional program. In addition, a related type of organization which provides some services to facilitate independent living by severely-disabled people, but does not meet the strict definition of an independent living program, has been identified and termed an independent living service provider.

An independent living center (I.L.C.) is controlled by the consumers it serves (either 50% of its board of directors or 50% of the staff is handicapped). It is nonresidential but provides a listing of accessible housing. It has either an attendant registry or provides attendants directly. It offers peer counseling and either paralegal or financial counseling. It conducts some sort of organized advocacy. And, its primary purpose is to serve as an ongoing support system to its clients, rather than as a short-term program designed to teach a specific set of independent living skills.

Unlike the center model, the independent living residential program (I.L.R.P.) primarily exists to provide an alternative to living in an institution or with the family. In addition to housing, it provides or coordinates attendant services and transportation services on an ongoing basis. It may also provide peer counseling services or opportunities for the natural development of self-help networks.

An independent living transitional program (I.L.T.P.) is designed to assist severely-disabled people to move from levels of relative dependence to those of relative independence. While its primary service is provision of independent living skills training, it may also provide housing, information registries, and other independent living related services.

An independent living service provider (I.L.S.P.) either does not meet the requirements for classification as one of the three types of independent living programs, or it is engaged in some activity which may foster client dependence, such as protective supervision, medical treatment, or sheltered employment. Many service providers for developmentally disabled and mental health populations fit this description. The I.L.S.P. does, however, offer a small number of discreet independent living services for handicapped people.

The three different types of independent living programs are similar to each other in that they are community-based, have consumer involvement, and provide services designed to facilitate independent living by severely-disabled people. Each of them is different to the extent that they provide either ongoing or transitional services, that they are either residential or nonresidential, and that they are either controlled by consumers or merely provide opportunities for substantial consumer involvement.

Several dimensions along which independent living programs may vary have been identified (Pflueger, 1977; and Frieden, 1980). These are: service setting, service delivery method, helping style, vocational emphasis, goal orientation, disability type served, program sponsor, management structure, geographical setting, and primary funding source.

Service setting relates to whether a program is residential or nonresidential, like a storefront operation. *Service delivery method* relates to whether services are provided directly by the program or indirectly through referral to other agencies. *Helping style* relates to the extent to which consumers are involved in the operation of the program. *Vocational emphasis* relates to whether or not vocational goals are prerequisites for participation in the program.

Goal orientation relates to whether the program is transitional or ongoing. *Disability type* served relates to whether the program focuses on people with a particular type of severe disability or whether the program provides services for people with many different disability types. *Program sponsor* relates to whether the program is sponsored by an existing health service, social service, or rehabilitation service agency in the community, or whether it is a comparatively new and independent entity. *Management* structure relates to the amount of control that the board of directors of the organization has compared to the control maintained by the executive director, or to the power of the director compared to that of the staff. Geographical setting relates to whether the program serves a primarily urban area with an extremely dense population, or whether the program serves a rural area with a comparatively scattered population. Primary funding source relates to whether the program is supported mostly by fees paid for services rendered, or by grants and donations.

These variables are not necessarily exclusive, but they may be useful in helping to describe differences and similarities between independent living programs. They may also provide a basis for future research efforts in the area of independent living.

Conclusion

In the early 1970's, independent living programs were viewed as experiments in community living by severely-disabled individuals. By 1978, these programs had demonstrated the unmatched ability to help disabled people live comparatively independent lives in their communities. As a result of their effectiveness, Public Law 95-602, the Rehabilitation Act Amendments of 1978, included a section (Title VII) authorizing federal support for independent living programs. With this support, the independent living movement blossomed, and new programs were established in each of the fifty states. Although political and economic contingencies make the future of independent living programs difficult to predict, there is no doubt that these programs have contributed to a "coming out" of severely-disabled people all over the United States.

Independent living has developed as both a concept and a programmatic thrust affecting the lives of thousands of severely-disabled people and many more family members, co-workers, and friends. Conceptually, independent living asserts that all people can and should be encouraged to make important decisions which affect their own lives. The theory of independent living, however articulated, affirms every person's right to choose from among available options where they live, where they work, where they worship, what they eat, what they wear, who their friends are, and so on. The theory also suggests that society has a responsibility to facilitate the independence of its disabled members by providing physical access to the environment and needed supportive services (Frieden, 1978).

Programmatically, independent living programs are providing vital services which disabled people need in order to move from institutions and other dependent settings into the mainstream of their communities. These programs are helping people to realize goals which they were forbidden to express a few years earlier, and they are helping them to gain the confidence and experience necessary to be productive and contributing citizens.

In spite of phenomenal growth in the independent living field, many thousands of people remain institutionalized and overprotected. Some of these individuals have chosen the style of life they lead, but most have not. They are awaiting the opportunity to acquire the information and skills which they need in order to become independent. They are awaiting resources in their communities such as accessible housing, transportation, and attendant care. They are awaiting the continued growth of the independent living movement, and new independent living programs which this growth will bring.

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PROJECT INTERACT

An Interagency Linkage System Between Education and Rehabilitation

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The term severely handicapped is often used to describe a group of individuals who display a broad range of disabling conditions and exhibit a wide variety functional characteristics. For the purpose of this article the term includes those individuals with one or more of the following: visual handicap; hearing handicap; multihandicaps, orthopedic handicap; severe behavior handicap; and/or moderately, severe or profound retardation. Functionally, persons with severe handicaps are those who exhibit severe communicative, behavioral, developmental, educational, and/or vocational problems. These problems are generally multiple in nature, are likely to continue indefinitely, and may require the services of more than one agency/system. The severely handicapped population, therefore, is such a heterogeneous grouping that no single system possesses the total resources (personnel, expertise, and/or finances) to meet their divergent and complex needs (Rubin and Roessler, 1978, Elder and Magrab, 1980).

In Ohio, a task force of consumers and professionals raised a variety of concerns with regard to the need for improved and expanded education and rehabilitation programs which resulted in a timely and appropriate transition from Education to Rehabilitation (Madden, et al, 1980). Specifically, the following needs were identified: 1) coordinated/cooperative planning to avoid service discontinuity as students move from the Education system into the Rehabilitation system; 2) development of interdepartmental mechanisms and services to refine and implement the Ohio Joint Memorandum of Collaboration between the Education and Vocational Rehabilitation Agencies; 3) development of a central base of information and an interdepartmental liaison system through which program refinement could be carried out; and 4) pre-vocational programs which equip the student with the prerequisite skills needed to function within the adult world of work.

In response to these concerns, Project INTERACT, an interagency effort, was designed to address the issue of timely and appropriate referrals of Ohio's severely handicapped students from Education to Rehabilitation by strengthening and facilitating programmatic cooperation between the Ohio Rehabilitation Services Commission (RSC) and the Ohio Department of Education (ODE), Division of Special Education (DSE). It was felt that this could be accomplished through a linkage system which provided mechanisms that resulted in the integration and utilization of resources available through Education (special, regular, or vocational) and Rehabilitation (the state rehabilitation agency or community-based facilities).

Specifically, the project was to: demonstrate, through the development of a local model linkage system, an interagency effort between RSC and ODE to improve the joint delivery of services to severely handicapped students; and design and/or modify student pre-vocational curricula/materials in order to prepare them to function in the adult world of work.

Project INTERACT was funded by the Ohio Rehabilitation Services Commission from September 29, 1980 through September 28, 1981. The site for development and implementation of the project was the Franklin County/ Columbus, Ohio area.

Referral-Based Local Linkage System

The model referral-based local level linkage system was devised in order to address the timeliness and appropriateness of referrals of severely handicapped students from Education to Rehabilitation. The system was developed by a committee of representatives from the primary agencies involved in the referral process and the project staff. The following steps (procedures) were followed by the project staff in designing/implementing the model system:

1. Goal Statement: A statement was established which clearly and directly articulated the specific purpose and intent of the linkage system.

2. Primary Agencies: Primary agencies were identified which represented only those agencies directly and actively involved in the implementation of the goal. For the purpose of a referral-based linkage system, the primary agencies filled the basic operational roles within the referral process: source (the component in which the referral originated - Education), agent (the component which acted as the referral conduit or broker - Rehabilitation), provider (the component which actually provided the service needed - community based facility).

3. Mandate, Purpose and Intent of Agencies: Federal and state laws were identified which govern the individual agencies involved in the system.

4. Local Operating Procedures: Local operating policies and procedures were identified that existed within the linkage area. This was accomplished by meeting with representatives from each agency individually.

5. Objectives of Linkage System: Specific statements were identified which reflected the objectives needed in order to achieve the goal of the linkage system (i.e., referral procedures, eligibility, etc.).

6. Selection of Linkage Committee Participants: A Linkage Committee participant was selected from each of the primary agencies; selection was based on the information gained through steps one to five above. In addition, consideration was given to the individual's commitment, time availability, authority within their system, and knowledge of their system, its operating procedures and the needs of

the population served.

7. Committee Meetings: Three committee meetings were held, one meeting every three weeks. Participants were provided a synopsis of each meeting and were contacted by telephone one week after each meeting in order to elicit their feedback. In order to provide structure for the meetings, the facilitator employed the following techniques: a) a realistic agenda was established; b) the content of each meeting was recorded; c) terms used by the different agencies were clarified or redefined generically and; d) information was charted on the chalkboard in order to assist in the clarification and conceptualization of the interface of the systems involved.

8. Follow-up: Follow-up was generated by the group. The facilitator was responsible for insuring that it occured.

It should be noted that within the context of this model that the facilitator functioned as the prime organizer of the linkage system and was responsible for the majority of the background development work. This function was important in establishing the initial direction of the system and in doing so in a time efficient manner. However, once the group was selected and the first meeting arranged, the group became the primary force in the development of the system. The facilitator became the clarifier, perception checker, mediator, and goal tender within the group. The facilitator struck a balance in the group between discussion and decision, thereby creating an atmosphere which allowed the group to reach consensus. The group's extensive involvement in the design of the linkage system resulted in expediting the task of system implementation.

The model linkage committee addressed the following: Interagency communication, the need to identify a continuum of services and the need for model referral procedures.

1) Interagency Communication: The degree to which an interagency linkage system is effective was thought to be dependent upon the communication that exists between agencies. The committee, therefore, sought to identify the primary agencies which need to engage in interagency communication, the levels at which communication should occur, and the frequency and the purpose of that communication in order to effectively and efficiently coordinate services to this population.

2) Continuum of Services: The committee attempted to chart the movement of a severely disabled student through an educational continuum and into and through the adult vocational continuum that exists in Franklin County. They also identified and established points of contact which were needed in order to create a working linkage between the two continuums.

3) Model Referral Procedures: The committee developed model referral procedures that would expedite and facilitate referrals. They viewed the referral of students within the context of a process that actually begins with the formulation of a goal for referral in the Individualized Education Plan (IEP) and continues until a determination of either eligibility or ineligibility has been made. Specifically, the committee sought to explain RSC's eligibility requirements, determine the kind of information needed to insure appropriate program planning in both systems, clarify the responsibility of persons involved, and establish a timeline of events which should occur to achieve a smoother referral process.

Model Implementation

The model linkage system was implemented within a major metropolitan area (Franklin County, Ohio) by providing a specialized inservice for the staff of the agencies directly involved in the linkage system. Regional meetings were also conducted throughout Ohio in order to disseminate Project INTERACT information and obtain statewide feedback.

Summary: Linkage System

Perhaps the most significant contribution of the linkage system and its materials has been the clarification of the issue of Right vs. Entitlement and its effect on how systems operate. Specifically, educators are beginning to understand that rehabiliation is not a rights program and that rehabiliation is restricted in its ability to provide services, the type of services it can provide, and to whom these services can be provided.

In terms of direct impact, the agencies involved in the model area are exchanging program information and staff expertise. The result has been increased communication and cooperation between agencies.

Thus far, the discussion has centered on the Project INTERACT's efforts in addressing the issue of timeliness and appropriateness in terms of the referral process and doing so within the context of an interagency linkage system. The remainder of this article will focus on the issue of appropriateness in relation to the preparation of severely handicapped students to meet the demands of the vocational options available to them in the adult world of work.

Programmatic Linkage Between Education and Rehabilitation

The creation of educational programs which interface with the components of the adult vocational continuum serves as the programmatic linkage between Education and Rehabiliation. As previously stated, severely handicapped students exhibit diverse levels of functional abilities and therefore the employment options available to them would cross the spectrum of the adult vocational continuum (i.e., adult activity center, work activity center, sheltered workshop, competive employment, and exceptional employment). The preparation of severely handicapped students to function within the adult vocational continuum requires a carefully designed educational continuum which is made up of program elements that interface with the components of the adult continuum.

In order to execute this programmatic linkage, Project INTERACT developed a functionally-based educational level system which includes a:

1) program development and evaluation process

2) functionally-based educational level sequence

3) documentation format

Program Development/Program Evaluation: This is a structure to be used by an administrator/supervisor in designing a comprehensive program which meets the needs of individual severely handicapped students. Specifically, it includes:

1) a checklist and description of a program development and evaluation process (adapted from The Walker System in order to meet the needs of an educational program);

2) a description of the program based on stated program goals;

3) a structure for developing program and classroom goals and objectives which relate to those of the student; and

4) program policies and procedures.

Functionally-Based Educational Level Sequence: The functionally-based educational level sequence focuses on those prerequisite skills needed to function productively and independently in the adult social, vocational, domestic, and community environments (White, 1980). These prerequisite skills are part of the concept of a work personality. This concept encompasses the ability to understand the demands of the world of work and to function within that world in an appropriate manner (Brolin, 1976) and (Mosher, 1978). A work personality primarily embodies four elements:

1) General Adaptive Behaviors: Psychosocial coping skills or behaviors;

2) Functional Skills: Self-care, daily living skills, recreation, mobility, and functional academics;

3) Work Behaviors: Application of general adaptive behaviors within the context of a work setting;

4) Work Skills: Specific skills needed to perform a task or job.

The functional sequence is designed so that a student acquires a work personality/prerequisite skills by progressing across levels of performance in the following content areas: language/communcation, self-care, mobility, social behavior, functional academics, activities of daily living, work skills, and physical development/leisure.

Entry/exit criteria have been developed for each of the content areas at each level of the continuum. The criteria can be used to determine where a student is currently functioning and what he/she needs in order to progress to the next level of performance.

The entry/exit criteria can be used in the formulation of instructional objectives which, in turn, become the basis for a functional educational curriculum. The criteria for each of the levels of the educational continuum should reflect the skills and behaviors needed to function within its companion component in the adult continuum.

A functionally-based educational level sequence allows for the following:

1) realistic planning and preparation of students based upon current and future students needs;

2) smoother transition from the educational continuum to the adult continuum as a result of appropriate planning and preparation

of students; and

3) development of education programs which can accomplish the above.

Documentation:

This format has been designed to assist in the daily implementation of the student's IEP and in the documentation of student/classroom/program performance. Specifically, it includes:

1) a Program Implementation Plan which provides structure for daily implementation of the IEP; and

2) a data collection format which provides structure for documentation of actual student performance which in turn can be aggregated to document classroom and program performance.

Level System Implementation

This functionally-based educational level system is currently being implemented in two sites:

1) a major city school system's program for students with severe/multiple impairments (K through 12);

2) suburban school system's entire special education program (K through 12).

Summary: Functionally-Based Education Level System

The level system provides a structure for teachers and administrators to use in the development of educational programs for handicapped students which focus on the skills required to function within the adult world. Additionally, this system provides a programmatic linkage between Education and Rehabilitation by infusing the demands/options/needs of the adult vocational continuum into the educational continuum.

Conclusion:

The issue of timely and appropriate transition of severely handicapped students from Education to Rehabilitation was addressed through the development of a linkage system and the design of a functionally-based educational level system. The combination of these two elements results not only in a smoother transition of students from one system to the other, but also in more appropriate preparation of severely handicapped to meet the demands of the adult world.

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ACCESS TO VOCATIONAL EDUCATION:

DEVELOPMENT AND USE OF A PLANNING SYSTEM

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INTRODUCTION, NEED AND PURPOSE

It is the right of every school-aged citizen of the United States to have provided for them a free and appropriate public education. However, historically, some segments of American society have not enjoyed this educational right because a variety of barriers has prevented their accessing public education and training opportunities, particularly those opportunities that might be most immediately useful to them. This situation has been especially true of secondary and postsecondary level disabled students who have not had access to occupational, vocational and technical skill training programs. As a result, only two-fifths of the mentally and physically disabled adults are employed during a typical year, as compared with three-fourths of all non-disabled adults. Average weekly wages of employed disabled males are 22% lower than those of their non-disabled counterparts (Levitan and Taggard, 1977).

Within training programs, the lack of provision of service is even more obvious. Even though P.L. 94-482, The Education Amendments of 1976, Title II, specifies a set-aside of 10% of the total grant award for handicapped students, disabled students comprise only 2% of the total enrollment in vocational education programs (U.S.O.E., 1978). Further, the Office of Civil Rights continues to process reports of scores of violations, ranging from unthinking to flagrant, that limit access to vocational training programs for handicapped individuals (Federal Register, 1979).

The purpose of this research and development project was to construct a Planning System that can be used to help remedy the lack of equal access which many handicapped students experience. The resulting product/process was designed to help educational administrators identify and remove barriers that limit program or facility accessibility. The particular focus of these materials was vocational education; however, the Planning System is applicable to any educational program.

METHODOLOGY

The development of the materials involved three processes of writing and review: (a) initial writing/rewriting (b) field test and (c) external expert review. Revisions were incorporated into the Planning System after each portion of the development process.

Initial Writing/Rewriting

Project staff, in conjunction with the Technical Advisory Group (TAG), the expert group selected to provide advice to the project, created a set of specifications that clarified the general requirement that the Planning System be "useful and usable." These resulting initial requirements influenced the structure of the Planning System and guided the writing task. They were:

1. The planning system was to be logical and conform to accepted practice in human service planning.
2. The planning system was to be usable in any public education setting, to be highly transportable, and not be overwhelming.
3. The planning system was to be adaptable such that local school units could use the system regardless of how much progress the school unit had made toward becoming accessible.
4. The planning system was to facilitate removal of four types of barriers: (a) attitude, (b) policy/practice, (c) architecture/transportation/equipment, and (4) communications.
5. The planning system was to contain only those procedures which were (a) adaptable to the issue of program accessibility, (b) relatively easy to use, and (c) sufficiently discussed in the research literature for a detailed description of the procedure to be written.

With these requirements in mind, a five-step Planning System and related materials were developed that conformed to the General Systems Model of Planning (Kaufman, 1972). The suggested procedures within each step were adapted from literature in public administration, health administration, educational administration, business administration, special education, vocational education, sociology and psychology. Each step was developed as a discrete process in order that local administrators could use only those steps that were applicable to their sitation. Within most steps, multiple planning procedures were offered in order that local administrators could match school characteristics and planning technique requirements. Use of a Local Planning Committee, a group of citizens, service providers and service users was provided throughout.

Field Test Approach

In order to establish usability and usefulness of the Planning System, a "quasi-case study" field test of the process was conducted in four different educational settings over a five-month period. Project staff introduced the Planning System, provided technical assistance to the educational unit upon request, monitored the process through its use, and collected information documenting the effectiveness of the System. The approach was termed a "quasi-case study" because, not only was each situation analyzed independently, but also, because results across educational settings were analyzed for similarities. Issues of particular concern were:

- What were the specific processes and outcomes of using the Planning System in each of the selected educational units?
- What suggestions were offered to improve the planning process and materials?
- Was the Planning System useful for making programs accessible?
- Was the Planning System usable from the perspective of the administrator?

Site Selection. Vocational education is offered in over 14,000 school districts and several thousand community colleges, public junior colleges and technical institutes. It also is provided in more than 2,000 secondary and postsecondary area vocational schools that have as their primary mission the teaching of skills that lead to employment. From this pool of potential schools, a representative sample of four school units was drawn using a stratified, weighted, nonreplacement design. Requirements of the sampling process were specified in the contract and by the Technical Advisory Group and included:

(1) Geographic representation of the four Department of Education Regions;

(2) At least two secondary and one postsecondary educational unit;

(3) At least one comprehensive high school and at least one area vocational school;

(4) At least one urban, one suburban, and one rural educational unit; and

(5) Maximal variability across the four sites on enrollments, socioeconomic status, the existence of teacher unions, and the number of training programs offered.

Using available data sources, all school districts, area vocational schools, and two-year postsecondary programs were grouped according to geographic location (east, south, west, central), grade leveland type of delivery system (postsecondary/secondary, comprehensive high school, and area vocational school), and environmental setting (urban, suburban, rural).

The typical number of program offerings, enrollments, and socioeconomic status were computed for each educational unit and units were ranked on the variables as high, medium or low; the presence or absence of teacher unions also was noted. Four sets of four sites were selected that provided maximized variance on the computed variables and met the specifications in terms of geography, grade level, delivery system, and degree of urbanization. The sets were ranked by TAG. (Multiple sets had been selected and ranked so that if one unit in any set declined to participate, another set could be selected.) The top ranked set agreed to participate. Descriptions of the sites selected appear in Figure 1, Site Characteristics.

Site A:

Location: South
Degree of Urbanization: Rural
Level and Type of Delivery System:
Secondary
Comprehensive High School
Existence of Teacher Unions:
Absent
Socioeconomic Status: Low
Program Offerings: Medium
Enrollment: Medium

Site B:

Location: East
Degree of Urbanization: Suburban
Level and Type of Delivery System:
Secondary
Area Vocational School
Comprehensive High School
Existence of Teacher Unions:
Present
Socioeconomic Status: High
Program Offerings: Low
Enrollment: Low

Site C:

Location: Central
Degree of Urbanization: Urban
Level and Type of Delivery System:
Secondary
Postsecondary
Comprehensive High School
Technical High School
Community College
Existence of Teacher Unions:
Present
Socioeconomic Status: Medium
Program Offerings: High
Enrollment: High

Site D:

Location: West
Degree of Urbanization: Suburban
Level and Type of Delivery System:
Community College
Existence of Teacher Unions:
Present
Socioeconomic Status: Medium
Program Offerings: Medium
Enrollment: Medium

Figure 1, Site Characteristics

Field Test Data Collection and Analysis. Data on usefulness and usability of the planning procedures were collected through interviews during the field test and through interviews and questionnaires at the end of the procedure. In addition, local education administrators who directed the use of the Planning System kept an anecdotal record of his/her activities, impressions, decisions, and suggestions while directing the planning.

Data anlaysis took three forms. First, activities were monitored in each educational unit via a traditional case study method to determine the results of the Planning System for that unit. Findings and local decisions were evaluated by project staff in terms of the local education situation to determine validity, resource requirements and usefulness. Second, consistencies between two or more respondents with similar role responsibilities across educational units and consistencies between two or more respondents who were involved in the same step of the Planning System within individual education units were examined; inconsitencies were resolved by collecting additional information. Third, all suggested changes in the process or materials were logged and grouped according to similarity for use in revising the materials.

External Expert Review

Use and selection. The third information collection and utilization activity in the development project was enlisting and using the help of a panel of expert external reviewers for the Planning System. A three level review was intitiated. One level consisted of reviews by members of the Technical Advisory Group (TAG) who had worked with the project throughout its duration. A second level consisted of reviews by Federal education officials. A third level consisted of reviews by a selected panel of potential users and researchers from the educational community. The third level of reviewers consisted of nine reviewers, selected through a nomination and screening process to fit prespecified categories of job experience. More specifically, reviewers had to represent the research community, the vocational and special education practitioner community and the educational planning community. Nominations were solicited from the TAG and state educational officials in every state. Potential nominees were contacted and screened; a final selection was made in conjunction with U.S. Department of Education officials based upon the required mix of expertise, interest and availability.

Data Collection and Analysis. The review process occurred during a set aside two week period and used a consistent data gathering and analysis procedure. Materials packages were distributed to each reviewer, together with a Review Guide and an audio tape. The Review Guide was used to focus attention on certain aspects of the materials including those depicted in Figure 2. The audio tape was used as a reporting mechanism to shorten the task, given the length of the materials. All data was transcribed and compiled by issue listed on the Review Guide. All noted language problems were corrected; other problems were resolved as suggested if at least two reviewers noted the problem or suggested a similar solution.

I. CLARITY OF PRESENTATION

- logic
- flow
- process
- product
- understandable as a stand-alone booklet
- goodness-of-fit to work situation
- directness
- visuals, picture, illustrations

II. LANGUAGE

- writing level
- vocabulary, sentence structure, grammar
- examples

III. COMPLETENESS

- coverage
- usability
- length
- learning effected

IV. SUGGESTIONS

Figure 2, Expert Review Concerns

FINDINGS

Findings from the field test and the expert external review were grouped into three categories: usefulness, usability and suggested revisions.

Usefulness referred to the validity of the process and the specific results and resource requirements associated with use of the Planning System in individual educational units. Usability referred to the effect of the Planning System on individual educational administrators and their organizations. Suggested revisions referred to those items consistently mentioned as needing revision in the next edition of the Planning System.

In terms of usability, findings revolved around reactions, reasons for use and commitment. In general, data indicated considerable administrative support for the planning materials because the system gave local administrators control and discretion over the process, but did not require the administrator to accept the entire responsibility for outcomes of the process. Items receiving particular support included the logic and adaptability of the system; the flexibility of the process to be adapted to local needs; the monitoring system; the provision of local decisionmaking; and the self-instructional format of the materials. Use of the process and materials also provided an opportunity to move toward compliance at the same time as experiencing personal growth.

In terms of usefulness, findings indicated that the Planning System was useful in a broad spectrum of organizations and educational endeavors including most specifically vocational education for handicapped individuals. Data indicated that the different steps of the System were as useful in combination or seperately; that multiple procedures within each step were viewed as critical; that the suggested procedures were effective and the outcomes immediately applicable; and that the process was clear. Depending upon the site in the field test, use of the Planning System required two to five months of elapsed time and 80 to 350 hours of administrative and staff time. Policy barriers, attitude barriers and architectural barriers were identified and specified; usable solutions requiring moderate resource expenditures were developed and implemented.

In terms of suggested revisions to the materials, the ideas were consistent and dealt primarily either with additional information or language revision. Major suggestions included:

- ° Directions about who in the organization should have responsibility for conducting the planning process.
- ° Additional graphics/illustrations
- ° A continous example across steps
- ° Additional sampler of useful questionnaires
- ° Additional content on bariers, potential solutions and exemplary practices
- ° More detailed directions about how to choose and adapt procedures to local settings
- ° Eliminate jargon and redundancy

OUTCOMES

Using the suggested revisions, staff developed the final set of materials and procedures that became the Planning System. The materials were written as a series of eight booklets and packaged in a cardboard slipcover. Only one booklet, the "Guide to the Planning System," was to be read in its entirety; it explained the system, described the options available to the local administrator, required decisions on planning procedures to be used, and directed activity throughout the planning process. Five of the other booklets, one for each step in the Planning System, were written as self-instructional texts. Each booklet contained detailed descriptions of the different planning procedures available for that step in the system. In addition, the booklet on identifying barriers contained attitude, policy/practice, and architecture surveys. The seventh and eighth booklets were supplemental resource guides, one that identified and briefly described exemplary programs and practices serving handicapped students in vocational education and the other that listed documents and organizations which could be utilized in removing barriers and creating accessible programs.

In addition, a Workshop Manual was prepared for school administrators to use when introducing the Planning System to their Local Planning Committee, community citizens or other educators. The manual included a twenty minute tape/slide show that introduces the notion of barriers and disability; a detailed explanation of how to conduct the workshop; and master copies of handouts and overheads to use during the workshop.

The Planning System as a process is a systematic five-step procedure through wich a school administrator can identify barriers, devise strategies to remove identified barriers and select among the strategies to insure removal of barriers to program and facility accessibility. Each step includes several alternative procedures/techniques through which to develop and process the information resulting from that step. The steps and procedures are displayed in Figure 3. The administrator can tailor the process to local needs, circumstances and information through the selection of techniques within each step.

STEP 1: IDENTIFYING BARRIERS

- Survey
- Delphi Procedure
- Nominal Group Technique
- Outside Experts/Consultants
- Community Impressions Procedures

STEP 2: ESTABLISHING PRIORITIES AND GOALS

- Modified Nominal Group Technique

Figure 3, Outline of Planning System

STEP 3: GENERATING STRAGIES FOR REMOVING BARRIERS

- Brainstorming
- Nominal Group Technique
- Synectics
- Charrette

STEP 4: SELECTING A STRATEGY

- Decision Matrices
- Cost Benefit/Cost Effectiveness Analysis
- Decision Trees
- Computer Simulation

STEP 5: REMOVING BARRIERS

- Force Field Analysis
- Management By Objective
- Program Evaluation and Review Technique

Figure 3, Outline of Planning System (continued)

The planning process utilizes the educational administrator and a group of people called the Local Planning Committee (LPC). The committee should consist of 7 to 15 members and should involve the broad range of people who will be involved with implementation and who will derive benefits from use of the Planning System. Use of the LPC provides for group decision-making as well as increased support for and commitment to results of use of the Planning System.

The entire five step planning process is flexible in terms of time and resource requirements for implementation. Field tests results indicated that the range of time and resources required varied form 40 hours of staff time and $200 to $400 hours of staff time and approximately $1,000. If previously collected information can be used or if the process can fill more than one purpose, the resource requirements will be reduced.

Regardless of local decisions about resources, or specific procedures to use, the general planning activities will be similar across educational settings. Planning proceeds in three phases, each of which is characterized by an activity and a product. The phases are depicted in Figure 4.

PHASE	ACTIVITY	PRODUCT
Phase I	Administrative Planning	Planning Record
Phase II	Collection of information using procedures noted on the Planning Record	Data Chart
Phase III	Removal of Barriers	Barrier Removal Schedule

Figure 4, The Planning Process

By grouping activity into phases, each with a set of activities and a product, the process (a) can be monitored by educational officials; (b) can be broken into easily manageable segments; and (c) can be used regularly over a long period of time.

CONCLUSIONS

Findings from the field test and expert review as well as more recent adoption of the materials/process indicate that the Planning System is a viable tool for planning for accessibility. Collected information suggested that the system was both valid and usable while program support for its use was high and resource requirements were low. The use of alternative procedures within planning steps coupled with the self-instructional format and the requirement for local decision-making was well received. Likewise, there was great support for the use of group procedures in program planning after using the materials.

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Slice of Life

Developed in the
Fremont Union High School District

BY

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SLICE OF LIFE

The SLICE OF LIFE is a vocational development program that was developed with a secondary special education population in a regular high school, grades 9-12. The program is suitable for other low-achieving groups that might be in continuation high schools, bilingual programs, juvenile court schools and/or alternative classes. Parts of the program are suitable for grades seven and eight.

It is important to understand that career education is a lifelong process that begins in the early years. Vocational development occurs in a continuum that includes awareness, assessment, training and placement. Movement through this continuum occurs differently for each individual. For example, some students may be ready for vocational training at the tenth or eleventh grade, whereas others may not be ready until after leaving high school. Career education is not a separate subject, but rather a concept that should be infused into all subject areas. It can be the key element that makes all subjects more meaningful.

The SLICE OF LIFE program is a comprehensive, sequential program that includes career awareness, career and vocational assessment, vocational training and vocational placement. It is a delivery system for career education. It provides a framework or structure that can be used in any classroom in any type community with a minimum amount of adaptation by the teacher. Student ability, classroom setting, and teacher management style were all taken into consideration in the development of this program. The program includes products and processes for the delivery of career education. The special education teacher, as the case manager for students, becomes the facilitator who helps guide the student through the continuum, by helping students connect with appropriate training and placement opportunities. It is indeed a very flexible and versatile program that teachers can implement easily.

CAREER AWARENESS

Career awareness includes knowledge of the world of work. In order to be successful in the world of work a person must acquire job-seeking skills, job-getting skills, and job-keeping skills. The SLICE OF LIFE curriculum kit provides a structure or framework that can be used to establish a complete career awareness program in the secondary special education classroom.

The kit includes a teacher resource file (curriculum guide), a set of student task cards and a student record card. The purpose of the *RESOURCE FILE* is to provide suggested resources and sample worksheets for individualized instruction. Sample forms and worksheets are included as examples for lessons. It is recommended that teachers expand and/or adapt lessons by using commercial and/or teacher developed materials. For implementation of the curriculum in a classroom, it is necessary to duplicate copies of the sample worksheets. There are a total of 75 tasks in the curriculum with about 18-20 per grade level. Approximately 25 tasks are repeated during the four years for the purpose of re-enforcement. They are the skills considered most critical for success in the world of work.

The *STUDENT TASK CARDS* are intended to be used as a motivational and informational tool for the students. One set should be in the classroom, readily available for students to browse through. Each card gives task directions and is attractively illustrated. The cards are color-coded by grade level, and the task numbers correspond with the teacher resource file and student record card.

The *STUDENT RECORD CARD* is an $8^1/2$ x 11-inch card printed on both sides, and is intended to be used as an ongoing record of student achievement. In addition to the student vital statistics, there are four categories of information. The 75 tasks in the curriculum are listed on the card so that teachers can verify satisfactory completion of lessons. Occupational interests and goals are included. A place to record all career and/or vocational assessments is provided. Other information to be listed is any vocational experiences a student may have had, either classes or jobs. The purpose of the card is to provide a record of all information relating to career and vocational education for each student which can be kept in the student's file. Each teacher that works with the student has the opportunity to determine what the student's accomplishments and needs are. The card is also a useful document for writing the vocational component of the IEP.

VOCATIONAL ASSESSMENT

The second component in the continuum of vocational development is career and vocational assessment. The process of planning career goals should be a part of the IEP process, and should be based on information obtained from appropriate assessment. This assessment should include career interests, abilities, aptitudes and knowledge of the world of work. It is the responsibility of the special education teacher to provide or to connect the student to an agency or other community resource for appropriate assessment in these areas.

Included in the S.O.L. Training Manual are brief abstracts of selected interest, aptitude and knowledge surveys that would be appropriate for the special education population or other low-achieving students. Selection of an assessment instrument will depend on teacher preference, student ability and desired information. A battery of tests should be selected that will meet the needs of a particular group of students.

The purpose of assessment is for the student to obtain information about him/herself and to obtain information about the world of work. It is the beginning of a process that will connect the student to a career when s/he leaves formal schooling. Self-awareness includes knowledge of likes and dislikes in regard to 1) working with people, data, things; 2) working environment; and 3) values. Values will relate to ambition, risk factors, life-style, work ethic and intrinsic rewards of work. All of this information as well as life experiences are factors in decision making about occupational choices. Decisions should not be left to chance, but be carefully considered over a period of time.

Assessment is not an end in itself, but rather it is part of the process of connecting a person to the world of work. It is a process that should be repeated because interests, knowledge, and skills change. Ideally, secondary special education students need to have a career interest assessment each year, because they are in a "searching" phase of their life. What they liked in 9th grade may be totally different than what they like in the 11th grade. Changing their minds is natural and typical.

They need to understand that it is O.K. to not be sure what they want for an occupation yet. High school is the time to be investigating and considering all the reasonable options. It is important to discover, over a period of time, what they like, what they dislike and then to make decisions and plan accordingly. Students must be taught how to plan and make wise decisions for themselves so they are not blown through life like tumbleweeds. Teachers must help students find clues for planning. Life planning depends on self-awareness and learning what is available in the world.

VOCATIONAL TRAINING FOR HANDICAPPED STUDENTS

"Vocational education teachers and others are being pressured to improve existing programs and develop new programs which will enable handicapped people to profit from vocational education. The goal of new and improved vocational programs is to increase enrollment in and completion of vocational programs by handicapped people, to enable them to learn employable skills. Pressure and encouragement to achieve this goal is coming from special education teachers, guidance and rehabilitation counselors, parents, advocacy groups and, of course, from handicapped people.

"The political and economic climate directs vocational educators toward this goal. Handicapped youth are leaving the educational system without the skills necessary to compete in the working world. Less than forty percent of all handicapped people are employed during a typical year. The average wage of those handicapped people who are employed is much lower than their nonhandicapped counterparts.

"Legislation passed in recent years mandates that handicapped people be given the opportunity to acquire vocational education. Although Public Law 94-482 (Education Amendments of 1976, Title II, Vocational Education) has set aside ten percent of the total grant for handicapped students, only two percent of the students enrolled in vocational education programs are identified as handicapped. However, Federal and State legislation, regulations implementing the legislation, and court decisions are beginning to have an effect upon the vocational education of handicapped students. Regulations which implement Public Law 94-142 (The

Education of ALL Handicapped Children Act of 1975) state that "Each public agency shall take steps to ensure that its handicapped children have available to them the variety of educational programs and services available to nonhandicapped children--including vocational education." Vocational education is to be part of the free appropriate public education detailed in Public Law 94-142. This legislation mandates a written Individualized Education Program (IEP) for each handicapped student.

"Other legislation, in the form of Public Law 93-112, the Rehabilitation Act of 1973, has much to say about program and facility accessibility for handicapped students and vocational education. According to this legislation, handicapped people are to be educated with people who are not handicapped, to the maximum extent appropriate to the needs of the handicapped persons. Handicapped students are entitled to an appropriate assessment followed by education designed to meet their individual needs. These public laws and their regulations refer to each other in that each law must be carried out in a compatible and cooperative manner with the parallel law." [1]

At the secondary level the provision of appropriate vocational training continues to be a challenge. With the decline in federal financial support, the need for creative planning is great. Special education teachers, as advocates for handicapped students, must work diligently in their own schools to see that vocational training opportunities are available. On-the-job training opportunities in the community may be possible in some areas. Special education personnel must communicate frequently and effectively with all teachers of vocational subjects. Personal contact as well as written communication with vocational teachers is necessary to establish a stronger working relationship for the benefit of students. Vocational teachers want to be successful with handicapped students, but they need information and support from the special education teacher.

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[1] A Handbook on Modifying Vocational Curriculum for Handicapped Students, Wisconsin Vocational Studies Center.

PLACEMENT

In a broad sense placement means any work experience paid or unpaid. The work experience may be on or off the school campus. An early work experience may be working as a paperboy or babysitting.

At the secondary level some students may be able to secure their own job, but others need assistance. Persons under age 18 are protected under the child labor law, with specific restrictions for the purpose of the safety and welfare of the youngster, Generally, the state labor laws parallel federal laws. The following information is taken from the California Labor Law and may not be precisely like that of other states. Each state law should be checked for detail. In California at ages 12 and 13, youth can work only on Saturdays, Sundays and during school vacations, for a maximum of eight hours a day or 48 hours a week. At ages 14 and 15, if they have completed the seventh grade in school, they can work up to four hours a day after school as well as on weekends and school vacations. At 16 and 17 they can work in agricultural occupations for as long as six hours on a school day. If they drop out of high school before graduation and accept full-time employment, they must attend continuation classes for at least four hours per week.

Youngsters under 16 years of age are forbidden to work in dangerous occupations:

- in or about a gasoline service station
- operating any automobile, motor car or truck
- in any bowling alley, pool, or billiard room
- where there is dust in injurious quantities, or where dangerous or poisonous acids, dyes, gases, or lye are being used
- on a railroad or boat
- on scaffolding, in heavy work in the building trades, in any tunnel or excavation, in or about a mine, coke oven, or quarry
- in assorting, manufacturing or packaging tobacco
- in any occupation dangerous to the life or limb, or injurious to the health or morals of a child

Boys and girls under 16 cannot work as messengers in a large city (population of more than 15,000).

No one under 21 can work in an establishment primarily selling alcoholic beverages consumed on the premises.

There is no minimum age for work in the presentation of any drama or legitimate play, including motion pictures, modeling, radio and television broadcasting, or the recording industry. However, a work permit must be secured from the State Labor Commissioner.

Job placement is a goal for every student. As soon as a student is "ready" they should begin with experiences that will provide an appropriate learning environment. A critical factor in the work environment is an understanding supervisor. It is highly recommended that students be able to acknowledge their disability and that the work supervisor be adequately informed in order that the situation be of mutual benefit to the student and the employer.

VOCATIONAL COMPONENT OF THE INDIVIDUAL EDUCATION PLAN

It is recommended that a vocational component be included in the IEP of every secondary student. Lower functioning students who may be destined for a sheltered workshop type of employment must have a plan with vocational experiences so that they can maximize their placement.

In writing the annual goal, consideration should be given to where the individual is in the continuum of vocational development. This continuum includes awareness, assessment, training and placement. The short-term objectives may be in any or all of the areas of the continuum.

An excellent resource for identifying goals and objectives is Donn Brolin's Life Centered Career Education: A Competency Based Approach, available through the Council for Exceptional Children, 1920 Association Drive, Reston, VA 22091. Another resource which is actually a data bank of instructional objectives is The Instructional Based Appraisal System (IBAS), available from Edmark Associates, P.O. Box 3903, Bellevue, WA 98009. Many school districts are developing a computerized bank of objectives for IEP's which include career and vocational education.

In addition to the vocational component in the IEP, it is important that there be a system for follow-up or feedback regarding the effectiveness of the vocational component. It is one thing to write the plan, and more important is the successful implementation of the plan.

The process of assessment, determination of needs, and establishment of objectives should be used for the planning of vocational development, like the process used for planning the student's academic education.

10.

The provision of appropriate career and vocational education is a unique challenge for secondary education. Historically, secondary education has been and is subject-matter oriented with each subject area being rather autonomous. In order to deliver a total career education service to special education students, it requires good coordination and communication between departments. The special education teachers need to know more about the world of vocational education and the vocational education teachers need to know more about the world of the handicapped. Bridges between must be strengthened and barriers eliminated.

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PROVIDING REGIONALIZED VOCATIONAL PROGRAMMING AND SERVICES TO HANDICAPPED YOUTH

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PROVIDING REGIONALIZED VOCATIONAL PROGRAMMING AND SERVICES TO HANDICAPPED YOUTH

Ronald F. Linari
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The need and responsibility to provide quality vocational programming and services to handicapped learners have received considerable attention in recent years. State and federal mandates have clearly established vocational preparation as a major priority, particularly for handicapped and other underserved special populations. The actual intent of the legislation is clearly specified in the joint policy statement by the U.S. Bureaus of Occupational and Adult Education (BOAE) and Education for the Handicapped (BEH) assuring that "an appropriate comprehensive vocational education will be available and accessible to every handicapped individual" (Federal Register, 1978). The reality of accessing vocational education for all students must be considered in view of the limitations in areas such as space, facilities, financial resources, availability of trained vocational/special needs personnel and inservice. The issue is especially critical to consider when combining the typically higher expenditures for vocational education and special education.

The necessity to plan and implement cost-effective programs and services is becoming even more of a problem with dwindling fiscal resources at local, state and federal levels. Many school systems are confronted with issues such as declining enrollments and greater competition for local funds, resulting in even greater constraints and required efficiency.

Collaboration at the state and local levels is one method to increase efficiency and reduce costs in serving handicapped learners through vocational education. The need to collaborate has been recognized at the federal level through the issuance of several memoranda. One particular memorandum refers to the development of formal cooperative agreements among special education, vocational rehabilitation and vocational education (Commissioners' Joint Memorandum, November 21, 1978). According to Albright et al. (1981), interagency collaboration has emerged as the prime mechanism for linking the vocationally oriented programs and services of the various agencies in a comprehensive and effective manner.

WHY REGIONAL PLANNING?

Planning and coordinating vocational programs and services require school systems to employ innovative and productive use of existing resources. Regional collaboration can be an effective practice for designing and implementing service delivery to handicapped learners.

Regional collaboration can be defined as the coordination of resources in planning and implementing program and service delivery to certain populations by local communities for mutual need and purpose.

Many factors must be considered when deciding whether or not to collaborate. These issues are essential in determining the feasibility of establishing a system of regionalized service delivery.

- Cost-effectiveness - Is there an actual savings as a result of collaboration, typically on a per pupil basis?
- Declining enrollments/rising costs - With a decreasing number of particular handicapped students, i.e. deaf, retarded, etc., would communities benefit from regionalizing in their effort to serve these populations?

- Transportation - Would regionalizing programs and services decrease or increase costs related to transporting students?
- Greater variety of offerings - With a larger number of students enrolled, could more vocational courses and services be provided?
- Low incidence population planning - Would savings for private placements and transportation be realized by returning students and offering a locally based program serving several communities?
- Staff utilization/sharing of resources - Could staff and resources be consolidated or mutually shared for better service delivery and cost-effectiveness?
- Less restrictive environment - Could programs be established in local schools whereby students would participate within a regular school environment rather than in a separate school or facility for the handicapped?
- Space utilization - Do the local school systems have the required space and appropriate facilities to provide for the population to be served?
- Administrative concerns - Would additional administrative personnel be necessary to coordinate the program(s)?

Each of these factors should be carefully evaluated and documented whenever a decision to collaborate is to be made. Meetings between administrative personnel of communities interested in collaborating are generally scheduled in order to review these issues and determine further plans of action.

REGIONALIZED VOCATIONAL EDUCATION FOR HANDICAPPED STUDENTS

In a recent review of the literature, limited reference to regionalized vocational education programs and services for handicapped students was found. This occurence may be a result of the recent emergence of programming and servicing special populations through federal mandates. Also, high school is often the final experience in formal education for many handicapped learners. Therefore, it is imperative that they receive the necessary preparation for the demands of a working society.

Regionalizing vocational education for handicapped students can be established through the following major activities.

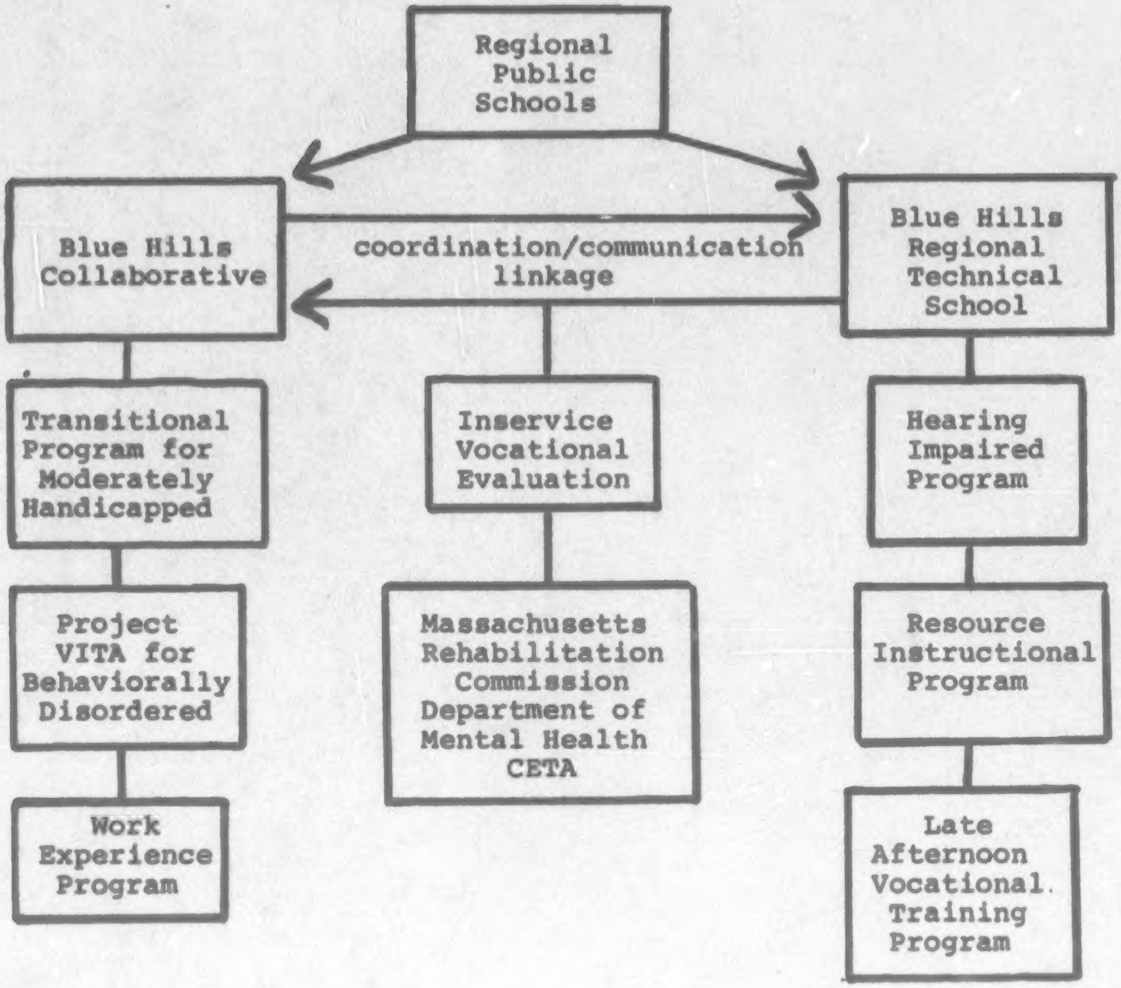
Programming

Organizing and implementing regional programs through collaboration can provide a cost-effective means in providing quality vocational education for handicapped students. These arrangements can be particularly effective for serving low incidence populations such as deaf, visually impaired, retarded and seriously emotionally disturbed youth.

An example of regionalized vocational education programs has been developed between Blue Hills Regional Technical School and the Blue Hills Collaborative (see Figure 1). A comprehensive network has been coordinated to service a variety of handicapped populations including hearing impaired,

Figure 1

A REGIONALIZED MODEL FOR VOCATIONAL COLLABORATION


Regional Public Schools
Blue Hills Collaborative
coordination/communication linkage
Blue Hills Regional Technical School
Transitional Program for Moderately Handicapped
Inservice Vocational Evaluation
Hearing Impaired Program
Project VITA for Behaviorally Disordered
Massachusetts Rehabilitation Commission Department of Mental Health CETA
Resource Instructional Program
Work Experience Program
Late Afternoon Vocational Training Program

developmentally disabled, behaviorally disordered, and learning disabled students.

Instructional Development

Curricula and related instruction can be planned on a regional basis with particular emphasis on vocational and career development. Career information and exploration could be geared toward the available vocational offerings in the region.

A coordinating agency such as a collaborative or regional vocational-technical school can be instrumental in the organization of instructional development. These entities could devise methods to plan and implement regionalized curriculum and instruction.

Vocational Evaluation

When various regional programs are present, a system of regionalized vocational evaluation of students is inherent in the system. One approach to regionalized vocational evaluation is being initiated cooperatively between the Blue Hills Collaborative and the Blue Hills Regional Technical School.

This system incorporates a plan to train existing special education, guidance and occupational education personnel in each of the regional communities. These persons will be responsible for participating in an inservice training program to develop the necessary skills to vocationally evaluate handicapped students (see Figure 2).

Inservice

Planning inservice on a regional basis can be a meaningful procedure for involving larger numbers of school staff through one coordinating agency. In this manner, a collaborative agency or regional school district could be contracted to provide inservice in areas such as vocational evaluation, career awareness/exploration, instructional methodology and vocational development for handicapped learners.

Job Placement Services

The availability of job placement personnel exclusively for handicapped students is not always possible in a single community. An alternative approach could be to employ a regional job placement specialist. This person could be accountable for the necessary responsibilities such as employer contact, student counseling, job placement and follow-up.

Transportation

A regional school district provides an already existing model for regionalized transportation services. Consideration should be given to utilizing these resources when locating

Figure 2

PERSONNEL PREPARATION: REGIONALIZED VOCATIONAL EVALUATION/CAREER EXPLORATION

Phase 1

Needs Assessment

Project Development

Staff Inservice and Training

Phase 2

Pilot Program

Refinement of Components

Continued Staff Inservice

Phase 3

Implementation of Program

Consultation to Local School Systems

Refinement of Project

Phase 4

Continued Implementation of Program at Local Level vocational programs for handicapped youth. These arrangements can also be most cost-effective.

Data Collection and Management

Implementing a system of data collection can assist local communities in managing the following vocationally related information.

- Numbers of handicapped students by category, age, grade, sex, ability level
- Projections over periods of time
- Planning, particularly for low incidence populations
- Identifying trends and related needs
- Projecting future costs based on need and numbers
- Establishing or modifying programs based on the above data

Resource Materials Centralization

Materials pertaining to vocational education for special needs learners can be centrally located through a regional model. This sharing of resources would allow staff to access instructional and related materials.

These arrangements can be conducted at a state or local level. Massachusetts has a vocational materials resource center located at a regional vocational-technical school for dissemination purposes throughout the state.

ALTERNATIVES FOR VOCATIONAL PROGRAMMING

In planning vocational programs for handicapped youth, oftentimes alternative formats are necessary in order to meet the needs of the population being served. Handicapped learners frequently require modifications to existing vocational programs in order to succeed. Adjustments to programming and services may be the only strategy needed to ensure successful participation for certain students. Some suggested alternatives for vocational programming are listed below.

1. Career Exploration

Infusion in the secondary curriculum could include visits to the various vocational training programs and facilities in the region. Students could also spend time in the programs/facilities observing or shadowing particular students in the vocational programs.

2. Work Experience

Students enrolled in a work experience component are involved in non-paid employment within the community. Participants are engaged in job training in a real work environment under the supervision of the employer and school personnel.

This model is especially appropriate for these reasons.

1. Lack of actual school-based vocational training facilities

Work Experience (Cont'd.)

    2. Assistance required for students in making the transition into the real work environment
    3. Monitoring of actual job performance in real life situations

3. Satellite Community Programs

This alternative can be described as a service oriented program whereby students are transported to work sites. The instructor teaches vocational skills to students in areas such as carpentry, basic electricity, masonry, building maintenance and plumbing. Students typically do repair and construction work at community buildings. This program is usually suitable for students who do not respond to the regular school milieu, e.g. behaviorally disordered and non-motivated students.

4. Subminimum Wage (U.S. Dept. of Labor), OJT Project (National Association of Retarded Citizens) and Targeted Job Tax Credit (IRS)

These programs offer financial incentives for employers to hire handicapped workers. These provisions are especially helpful for placing difficult to employ handicapped individuals.

5. Massachusetts Chapter 766 Prototype, 502.11b

The Chapter 766 regulations of the Comprehensive Special Education Act are concerned with providing alternative programs and/or services for students who are unable to participate in an existing regular or special education program. This prototype can be employed with vocational options for hard to serve handicapped youth. This regulation allows school systems flexibility in arranging work/ school credit, part-time programming and other modifications.

6. Experience-Based Career Education (EBCE)

These programs were originally developed nationally at sites in Oregon, Alaska and Washington. EBCE students spend a major portion of their time on learning projects in the community.

The curriculum emphasizes guiding students in their learning by ongoing relationships with working adults in various settings. The curriculum generally concentrates on the areas of life skills, basic skills (academic) and career development.

Planning EBCE on a regional basis can be a most valuable method to increase student employability skills in a consistent manner. The curriculum serves as a natural model for regional planning and use of community resources on a broader scale.

7. Linkage With Agencies, Industry and Private Schools

Agencies such as the Division of Vocational Rehabilitation, CETA and Division of Employment Security can be most effective in coordinating training and fiscal resources. Jointly funded programs can mutually benefit the various agencies to meet client-service needs.

Contracting with private schools which have vocational facilities not available to the public schools may be conducive to meeting local needs. This type of regional planning can be cost-effective and enhance local vocational training options.

8. Afternoon Vocational Training Program

Late afternoon training programs utilize existing facilities and personnel after the regular school day. These arrangements provide opportunities for an increased number of students to benefit from a vocational-technical facility.

Expanded access also gives handicapped learners the potential opportunity for smaller group instruction and more individual attention normally associated with these programs.

9. Consulting Vocational Resource Personnel

Persons employed on a regional basis can conduct effective program management, instructional support and consultation to students and staff. Shared services may include job placement, vocational resource instruction, career exploration, vocational counseling, inservice, vocational evaluation and regional administration/ coordination.

10. Regional Job Data System

A regionalized data bank of available jobs in the community can be a useful resource and time-saving mechanism. Personnel from each local community can contact a centralized source whenever job placement services are required.

This system may be computerized and regularly updated for distribution to participating local school systems. Thereby, local school job placement personnel would not be required to spend as much time seeking employment for their students.

CONCLUSION

The concerted and combined efforts of vocational, regular and special education are required in order to meet the similar and unique needs of handicapped individuals. This alliance may be effectively articulated through regionalized planning and implementation of vocational programs and services for special needs populations. In this manner, more diverse provisions may be actualized in an economically efficient, resource sharing approach.

The end result of these efforts will be a new beginning for handicapped learners, assuring that an appropriate comprehensive vocational education be available and accessible to them.

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SALEABLE SKILLS TRAINING PROGRAM

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Abstract of Program:

The SALEABLE SKILLS TRAINING PROGRAM is part of a comprehensive career/vocational educational model for secondary aged handicapped students through the combined efforts of special educators, vocational educators, administrators, community people, employers, university personnel and state department personnel to assure that handicapped students will have career/vocational training that is relevant to the job market, meaningful to their career aspirations and realistic to their fullest potential.

This multidiscipline approach is being developed through a sequence of inservice, community survey and curriculum writing sessions. This is to ensure that special needs students will receive training from persons competent in relative understandings of the handicapped student and in the relevant knowledge necessary to provide a curriculum based on career/vocational education. As a result, a vocational component will be implemented in each student's I.E.P.

A variety of procedures are used to provide training for students. First year students are involved in an exploratory skill program where they receive exposure to several skill areas. Students then move into the skill training area based on interest, aptitude, exploration, vocational evaluation and teacher assessment. After students satisfy the performance objectives of the training program they are placed on certification. If the students are certified they may then be placed in an on-the-job training situation with local agencies providing matched funding to the employer. When students have successfully completed this process they are placed in a permanent work situation or further vocational training.

The ultimate aim is to create an atmosphere in which all facets of the community can work cooperatively in helping to develop marketable career decision making skills and vocational skills in each student which will result in meaningful job placement and successful citizenship.

PHILOSOPHY

We believe that the population of students classified as mildly handicapped are capable of obtaining and maintaining resourceful positions in competitive employment which will afford them economic self-sufficiency in adult living. As special educators and vocational educators, we must devote our professional efforts and energies toward assisting special students in manifesting those abilities and talents which will enable them to achieve self-fullment in adult life.

Implicit in the special nature of the students being served is the need for SPECIAL TEACHING TECHNIQUES and LEARNING MATERIALS. Thus, the difference between special instructional programs and those designed for regular-education students is not in a reduction of the standards of QUALITY for education, but in the METHODS employed to achieve those standards.

It is with this philosophy in mind, that the SALEABLE SKILLS TRAINING PROGRAM was broughb into exixtence, a program which will help special needs students stand on their own two feet and experience the opportunities and successes that this type of education can provide.

PROGRAM DESCRIPTION

The GOALS of the Saleable Skills Training Program are:

To increase the degree to which special students are accomodated in training programs which are compatible with their handicap and relevant to their occupational choice

To develop suitable curriculum and materials

To develop modified instructional techniques

To help find appropriate employment for these students

UNIQUENESS

The important difference between this project and others throughout the country is that the training occurs in a REGULAR COMPREHENSIVE HIGH SCHOOL rather than in a special center or vocational school. Also, the teaching staff includes special educators and vocational educators, an alliance typically absent in most school programs. This collaboration results in a course of study that includes career and specific skill building within a context of individualized instruction.

DEPARTMENT ADMINISTRATION

The Special Education Department at Coronado High School is comprised of four teachers who provide instruction in five areas: Work-Experience-Study (WES), Vocational English and social studies (for students who are not mainstreamed in these areas), resource help and in the Emotional/Behavioral, (E/B) Program.

NON CATEGORICAL - MEET STUDENT'S NEEDS

Any special education student may be enrolled in a variety of programs. An E/B student may be in WES and a Skills area and also be receiving help in a resource class. A resource student may be in a Skills class and a WES student may be enrolled in a Vocational social studies and English class, a resource class and a Skills class.

A student enrolled in the WES Program may be placed on work experience in school or in the community and still be enrolled in a Skills class. Typically the Skills classes are one-two periods in length and are chosen as any other elective. The one - three hour a day work experience placements are for work experience and not higher skilled entry level jobs as Skills training will provide.

If the staffing team determines that the goals and objectives for a student should include vocational preparation and training, available options are examined. The Skills Program is usually determined to be the best alternative vocational program for a special student.

Upon placement in the Skills Program, a vocational I.E.P. is developed by the special educators, vocational educators, the student and parents which include the goals and objectives to meet the student's career and vocational goals.

FIRST YEAR - SKILLS EXPLORATION

A class in Exploratory Skills is offered to all first year students. The class is basically an Industrial Arts type of activity. While most of the 'doing' activities are personal projects, the students have completed work for businesses within the community. Class size is limited to 5 - 8 students and takes place in a small shop facility used exclusively by Special Education students. The teacher has an I.A. carpentry and cabinet making background and teaches three exploratory classes and two I.A. Woods classes.

The personal project approach seems to be fostering greater motivation and self-concept with our sophomores. As with the regular I.A. student who can 'explore' his sophomore year then choose a vocational area his junior or senior year, so it is with our special students in the Exploratory Skill area. They EXPLORE . . . . . then choose.

SECOND - THIRD YEAR

FOOD SERVICE

The Food Service class covers occupations related to the food industry. Experiences are directed toward fast food and full-service restaurant operations including sanitation, dishwashing, fry cooking, grilling, baking, busing, waiter-waitress training, salad and sandwich preparation, beverages, food storing and care responsibilities.

This class meets for two periods daily and is taught by a vocational home economics teacher in a kitchen facility developed exclusively for the special education students.

The Skills kitchen is equipped with domestic type appliances and equipment as commercial-type was prohibitively expensive. We did purchase commercial knives, potato slicers and a meat slicer to teach the students the safety precautions necessary for these potentially dangerous items.

Instruction centers on the use of domestic equipment followed by experiences in commercial kitchens in the community. For example, students learn fry cooking using a frying pan, a griddle and deep-fat fryer. Then they go with the teacher to a local restaurant to learn how to use commercial fryers, griddles and deep-fat fryers.

In the Food Service area, as in the other Skill areas, we are implementing career concepts along with the vocational concepts so the students are also learning independent living skills necessary for their post-high school life roles.

The Food Service teacher also offers classes in independent living skills, cooking, and sewing.

WOODS

The Woods program provices the student with beginning skills and knowledge in the following areas:

1. basic hand tool and machine operations
2. general shop safety and safety consciousness
3. measuring
4. carpentry
5. cabinet furniture construction
6. drywall - taping and texturing
7. finishing techniques
8. production procedures

Our Woods students meet the first two hours of a three-hour regular Vocational Woods class five days per week. The class is supervised by a Special Education resource teacher.

We have not had any student accidents during the two years and credit this record to adequate supervision which has allowed for greater individualized instruction and observation.

Actual shop work and activity is implemented through consignment from local industry, personal projects, assigned projects, production of saleable items and other projects which are instructionally valuable to the student.

Last year the students built a storage shed for a local lumber firm and when their truck came to take the shed back to the lot to sell it the students realized that their work for those months was gone and they had nothing to take home! From this experience we learned that the students perform much better, their attendence showed marked improvement, and they are more highly motivated when allowed to work on personal projects.

Our basic method of instruction is the demonstration; both group and individual. The major part of our evaluation in Woods is performance in the shop and on-the-job.

While the Woods part of our Skills Program is the only area where the students are mainstreamed, we have found that the peer relationships between the regular and special students improves as the kids get to know each other. In some work situations the regular and special students are teamed and both students share the machining, assembling and finishing responsibilities of their assigned jobs.

WELDING - MACHINING

Students enrolled in these Skill areas may elect to take either welding or machining or both. This class meets one period a day, five days per week and is taught by two vocational teachers, the Vocational Metals teacher and the Vocational Drafting teacher, in a self-contained setting. Most of the students enrolled in these skill areas are also enrolled in a General Metals class. In this mainstreamed setting a Special Education teacher resources the metals teacher in helping the special students with measuring skills, vocabulary, reading, workbook activities and blueprint reading.

Skills Welding provides students with entry level skills and related knowledge in shielded metal-arc welding, oxy-acetylene welding, Mig (metalic inert gas), Tig (tungsten inert gas) welding, and related metal fabrication skills.

The machining class provides students with job entry level skills and related knowledge of the lathe, vertical mill, surface grinder, and other metal related machines.

AUTO-DETAIL

The Auto-Detail class is an example of an adapted vocational program. Most of our Special Education students could not successfully complete the Auto Mechanics course due to the reading requirements.

In the Auto-Detail class the students learn to take care of the appearance of the car, both new and used. Specific activities include: engine cleaning and painting, upholstery cleaning, washing, window and tire cleaning, polishing, waxing and buffing.

This class is taught by the Vocational Auto Mechanics instructor in a self-contained setting and meets for one hour daily. When students complete the competencies for both the instructor and the employer, and are not placed on jobs they receive training in body-fender, tire mounting and balancing, and restoration and light mechanical work.

CERTIFICATION

After students satisfy the performance objectives of the training program, as determined by the teacher, they are placed with an employer for CERTIFICATION. This certification process provides us with an employer evaluation of the student's skills. Certification then leads to:

1) a possible On-The-Job (O-J-T) with local agencies or the Colorado Division of Rehabilitation (CDR) providing matched funding

2) a job reference by the certifying employer

3) re-cycling back to the Skills Program for advanced training if a job is not available

4) further vocational training in another setting

When students have successfully completed the O-J-T process and are placed in a permanent work situation the employer is expected to provide all wages and benefits. Students receive no pay during the certification period of approximately 30 hours as they are not considered to be productive employees, rather they are being evaluated by the employer as to whether or not they have the achieved competencies to be considered competitive workers. This certification process takes place during the regular school day and is considered as a classroom within the community.

STAFF DEVELOPMENT

To initiate staff development through an inservice process, we invited Dr. Jack Schuetz, Director of Special Education, Kern County, Bakersfield, California, to spend the first week with us. We had visited Jack's Career Training Center and were so impressed with his philosophy and dedication and his staffs' enthusiasm that we decided he would be the best person to help us get started. Together, with Dr. Joan Fairchild, Associate Professor in the Special Education Department, University of Colorado, Colorado Springs, an inservice program was conducted for our staff of five vocational teachers, three special education teachers, one regular educator and a graduate student from UCCS receiving practicum experience. We met for six hours a day for four days with Dr. Schuetz and Dr. Fairchild.

Topics covered included:

Handicapping Conditions
Student Disabilities
Teaching Strategies
Instructional Process
Individualized Education Planning

THE INSERVICE MODEL

To meet the needs of students, the needs of educators must also be met. This was the basis for the creation of our inservice model which includes the following features:

Staff meetings for the special and vocational teachers are held on a weekly or bi weekly basis.

Staff members are encouraged to share ideas and feelings about successes and failures. They are asked to become involved in seeking solutions to immediate and long-range problems related to students and the program

- attendance
- behavior modification
- scheduling
- grading
- transportation
- skills pladement
- safety
- discipline
- individualization
- work ethic behaviors
- referral process
- handicapping conditions
- drug-alcohol abuse
- skills offerings

Staff members utilize inservice time to develop, modify, and complete necessary paper work

- I.E.P.'s
- lesson plans
- task analysis
- job analysis
- competencies
- curriculum
- equipment orders
- supply orders

We have developed a pre-service program for the faculty and staff members at Coronado to explain our program through a slide presentation.

One strategy we used during inservice was to have each teacher take 15 minutes to write about: 1) Positive features of the Program, 2) Problem Areas and 3) Solutions. We then had each teacher talk for two minutes about these topics. The session was extremely successful. We found we had many positive features and a few major problem areas. COMMUNICATIONS and SOLUTIONS resulted.

REFLECTIONS ON STAFF DEVELOPMENT

1. The vocational instructors found, and are still finding, that there are no absolutes, no right or wrong answers when it comes to dealing with students with learning disabilities or emotional porblems. They expected the special education teachers to have the 'magic wand', to have all the answers.

2. A major finding in our two year venture is that COMMUNICATION is the bottom line - A MUST - if any such cooperative venture is to succeed between the vocational and special education teachers. Our weekly inservice meetings are helping to bridge this communication gap.

3. There is a definite difference in teacher expectations of students between the vocational and special education teachers. We found that the vocational teacher's expectations of special students are more of an employer-employee relationship while the special education teacher's expectations were more individualized based on students' background, past records and progress. The vocational people accused the special education people of not understanding employer's expectations, and the special education people accused the vocational teachers of being too rigid in student expectations and of not understanding the complexities of a special student. This of course, has caused a miriad of problems.

4. The 'mainstream' approach can work in vocational classes providing:

    a. class size is kept to a maximum of 20 students - 15 regular and 5 special

    b. exams, in most cases, must be modified to oral rather than written

    c. a special education teacher must be present in the lab with the vocational teacher

    d. the special education teacher must have a basic knowledge of the vocational skill and must be able to perform the basic operations of the skill area

5. We learned, the hard way, that it is fruitless to involve the staff with the development of 'forms'. Much time is wasted! Use our forms, plagerize or modify - but don't re-invent the wheel.

6. Hold inservice meetings, at times, away from the school building - the relaxed atmosphere of a home can be a plus.

TACTICS

1. Both the local special education and vocational education administrators must be involved from the onset of any new program. Contrary to some vocational beliefs, an association and cooperation with special education will not jeopardize existing vocational programs. We have found, rather, that is strengthens them

2. Provide management with the solution for the problems of vocational preparation for special students. We can do this; we are qualified; give them the answers; provide them with the rationale.

3. PARENT and EMPLOYER ADVISORY GROUPS are recommended if a new program is to succeed and meet students' needs.

4. Educate the local SCHOOL BOARD. With the variety of problems and situations school boards must deal with, it becomes critical to INFORM them - let them know the WHO, WHAT, WHY, WHERE, and HOW of the program.

5. PUBLIC RELATIONS with kids, parents, regular educators and administrators WILL HELP. Don't forget the LOCAL MEDIA.

6. Develop TACTICS TO EDUCATE REGULAR EDUCATION STUDENTS. We show the slides of our program to both the special and regular kids in our mainstreamed Woods class. Use PEER TEAMS when building or making something.

7. INVITE everyone to VISIT the program. It is EXCITING to watch our kids in action; producing and achieving. Word gets around - people will hear about the program and will become SUPPORTERS of it.

8. HELP YOUR KIDS. Most of our students don't have valid employer references when applying for a job. We explain to our employers who are doing the certification, that if they certify the student as being competitively employable, they are also agreeing to let the student use their name as a REFERENCE.

9. Be aware of local educational policies. Who are the people who will cooperate with you? FIND THEM and USE THEM to help you.

10. We have found that our location, the vocational and special education teachers housed in the same building, has been a plus for our porgram - it fosters imporved communications and understandings.

11. Some special students will never succeed at competitive job placements even though they can still benefit from vocational classes. Consider alternative hands-on activities for them.

12. Find MONEY to pay your teachers extra if this will solve teacher time problems.

13. We have noticed that the vocational teachers would not teach a full load of special students, but seem to like the combination of both regular and special.

14. Develop your program with a CAREER AWARENESS PHILOSOPHY. Be FLEXIBLE. MEET STUDENT NEEDS. Specific job training can be done when there is a specific job available.

A booklet of this program which includes information on lesson plans, the instructional process, test modifications, competency forms, I.E.P.'s, etc. may be obtained by writing to:

Dr. Chiyo Horiuchi, Consultant
Colorado Department of Education
201 East Colfax
Denver, Colorado 80203

El Centro College
Vocational Rehabilitation Program -
A Non-Traditional Approach to Adult Career Education

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The purpose of this paper is to discuss the El Centro College Vocational Rehabilitation Program including: I. Overview of the Texas Rehabilitation Commission; II. Purpose and Definition of the Program; III. Major Objectives; IV. Description of Courses Offered; V. Enrollment Procedures; VI. Program Advantages; and VII. Accomplishments.

I. OVERVIEW OF THE TEXAS REHABILITATION COMMISSION.

The Texas Rehabilitation Commission is a state agency which provides handicapped individuals with services that will enable them to enter or return to gainful employment. Eligibility for Texas Rehabilitation Commission services is determined by two requirements:

(1) The individual must have a physical or mental disability which for such individual constitutes or results in a substantial handicap to employment; and

(2) Vocational rehabilitation services may reasonably be expected to benefit the individual in terms of employability.

Available services include:

EVALUATION - medical, psychological and vocational - to determine the nature and degree of disability, and to assess work potential;

COUNSELING AND GUIDANCE - to deal with problems, select a proper vocational goal, and make plans to reach it;

INTERPRETER SERVICES for the deaf;

MEDICAL TREATMENT - including surgery, hospitalization, and other therapies - to reduce or remove disability;

ASSISTIVE DEVICES - such as artificial limbs, braces, wheelchairs and hearing aids -- to improve functioning;

TRAINING for the right job in a trade or business school, in college, in a rehabilitation center, on the job, or at home;

ROOM, BOARD AND TRANSPORTATION during rehabilitation;

TOOLS, SUPPLIES AND LICENSES to help in obtaining and maintaining employment;

INITIAL STOCK AND SUPPLIES for self-employment enterprises;

PLACEMENT in a position suited to the individual's ability; and

FOLLOW-UP after placement to insure job success.

Texas Rehabilitation Commission services are designed to fit an individual's needs. Clients meet individually with a Texas Rehabilitation Commission counselor for testing and evaluation in order to determine eligibility for services. Those clients whom the Texas Rehabilitation counselor feels will benefit from the El Centro Vocational Rehabilitation Program are referred for evaluation and/or training.

II. PURPOSE AND DEFINITION OF THE PROGRAM.

The El Centro College Vocational Rehabilitation Program originated in 1975 with a federal Innovation and Expansion Grant. It began with limited classes in Human Development, Math, Reading and Janitorial Services and has expanded to include: Business classes, Beginning and Advanced Human Development classes, and additional Math and Reading classes.

The purpose of the Texas Rehabilitation Commission - El Centro Vocational Rehabilitation Program is to provide a viable plan that will engage handicapped and/or disadvantaged individuals in relevant learning experiences so that these people may be able to develop useful skills that will enable them to lead more satisfying and more independent lives.

The Texas Rehabilitation Commission - El Centro College Vocational Rehabilitation program provides a period of evaluation and training for students that expands their job entry level skills. The program also provides personal/social adjustment training that helps the students to better manage their interpersonal relationships both on the job and in other situations. Vocational guidance and systematic goal setting skills are provided.

III. MAJOR OBJECTIVES.

The objective for this project is to recruit, test, train and assist in placing handicapped individuals. After the student completes the total program, it is expected that he will have increased living skills that will enable him to contribute toward himself and society in a more meaningful manner. This will be accomplished by:

A. Providing a medium through which the handicapped individual can explore feelings and attitudes particularly in relation to his disability.

B. Providing a process that will enable the handicapped individual to realistically assess his strengths and weaknesses.

C. Providing a structured program to enable the handicapped person to explore career options in light of his current abilities, interests and experiences.

D. Encouraging the handicapped individual to research career options to determine their feasibility and desirability.

E. Providing information about educational opportunities and options to enable the handicapped individual to obtain the training necessary to attain a career goal in the most efficient way possible.

F. Determining if remedial course work is necessary before job training is attempted in order to maximize the individual's success in an educational and career experience, and providing courses to meet these objectives.

G. Enhancing self esteem through classroom successes and thus encouraging the desire for learning, thereby increasing the potential of each individual.

H. Providing a system of reinforcement for career motivation.

I. Providing career training in business courses for those individuals whose career goals indicate these courses.

J. Assisting individuals in obtaining satisfactory employment to meet either short-term or long-term goals.

IV. DESCRIPTION OF COURSES OFFERED.

A. HUMAN DEVELOPMENT.

Program goals include development of job search skills, development of personal/social adjustment skills, and development of work-adjustment skills. An important component of the program is working with the individual to develop realistic attitudes and goals that will facilitate life-long adjustment for personal happiness and satisfactory social interactions. To help meet these goals the following courses are offered:

1. Human Development: personal/social adjustment is accomplished through a structured system for analyzing feelings, teaching effective means of communication, exploring attitudes and values, and using rational thinking

techniques. Work-adjustments involves career exploration, decision-making, job ethics and responsibilities, job search and interview techniques.

2. Advanced Human Development (Prerequisite: Human Development): provides additional work in areas of communication skills, emotional control, assertiveness and other self-improvement techniques.

B. DEVELOPMENTAL STUDIES.

Being able to read and perform basic mathematical tasks is of paramount importance to the personal, social and vocational success and satisfaction of many individuals. An important rehabilitation goal for many clients is to learn basic reading and math. Frequently the client experiences his initial feeling of pride and accomplishment that hard work brings when the client passes the General Education Development Test (G.E.D.) upon completing the developmental studies portion of the El Centro program. The Developmental Studies classes are self-paced and each individual's specific career goal is considered as part of that student's educational plan. The following courses are offered:

1. Developmental Math is offered on a self-paced individual basis and is designed to aid the student in understanding basic mathematical skills and techniques in order to meet academic and/or on-the-job training requirements.

2. Developmental Reading is a course designed to develop the individual's reading level to enable him to attain his vocational goal. Phonics, comprehension, vocabulary development and study skills are emphasized.

C. BUSINESS MODULE.

Many of the students enter the El Centro Rehabilitation Program without a viable skill with which to make a living. The business classes that are offered afford the rehabilitation client an educational opportunity to gain marketable tools that will enable the individual to seek a satisfying vocation. The following courses are provided:

1. Bookkeeping: The course is designed to acquaint the student with the fundamentals of double-entry bookkeeping in a practical business situation. The course will take the student from financial transactions to financial statements. By the end of the program, the student will be at job entry level. (Prerequisite: Student should be able to do the four basic operations of mathematics as well as having developed the skill of problem solving.)

2. Office Machines: The course is designed to provide the student with a skill in the operation of adding machines, printing calculators, and electronic calculators. Emphasis is placed on the touch system, stressing accuracy and speed in performing basic functions, including problem solving.

3. Office Procedures: The course is designed (a) to equip the student with the basic knowledge and mechanics of business writing: grammar, usage and style, as well as oral communication appropriate in business, and (b) to provide a strong foundation of alphabetic and numeric filing systems and basic office duties required of all qualified office workers.

4. Typing: This self-paced course is designed so that the student will develop the ability to type acceptable straight copy at the rate of 50 WPM and at a minimum rate of 15 NET WPM, develop ability with the use of the dictaphone, develop ability to perform tasks involving special business communications, letters and tables.

V. ENROLLMENT PROCEDURES.

The Program operates on flexible entry, flexible exit procedure in order to best serve the client by meeting his individual needs. Educational needs are assessed upon entry into the program so that the student can best receive those courses which will provide a strong background for attaining individual goals. Courses are self-paced, and each student is frequently evaluated and made aware of that evaluation through constant feedback made possible by the relationships established between the staff and the students.

VI. PROGRAM ADVANTAGES.

The following describes the advantages afforded the individuals and the institutions involved in the Texas Rehabilitation Commission - El Centro Vocational Rehabilitation Program:

A. STUDENT'S ADVANTAGES.

1. Each individual is provided an educational plan that can strengthen that person's potential for academic vocational pursuits. The Vocational Rehabilitation program at El Centro College also provides an alternative program for individuals who lack either the desire or the potential for academic training.

2. Each individual's needs are met in a small class setting allowing the student to receive the attention needed to facilitate that person's obtaining desired goals.

3. Each student's program is designed specifically to meet his own needs. The program is self-paced, allowing each student to develop needed skills in relation to particular goals.

4. Many individuals have shown an increase in self-esteem while experiencing success and professional support in reaching goals. Many individuals express pride in being able to attend an institution of higher learning.

5. Each student is provided the opportunity to enjoy learning in the warm and accepting environment that has always been fostered at El Centro College.

6. Each person working with the Texas Rehabilitation Commission - El Centro Vocational Rehabilitation Program is dedicated to helping the students and has the capacity to establish an excellent rapport with the students. All have a good understanding of rehabilitation and implement the methods and goals of the program. The Texas Rehabilitation Commission - El Centro College Program involves a team approach to education.

7. The individual is able to obtain personal and social adjustment skills which are usually available only in sheltered workshops.

8. Students are given the chance to receive vocational guidance and are given instruction in job-seeking skills.

9. Individuals who need personal counseling during their time at El Centro can take advantage of the counseling hours of three trained Rehabilitation Counselors on the Vocational Rehabilitation Program staff.

10. Special services for individual needs are provided. For example, many students are currently taking advantage of the opportunity to learn about the benefits of proper nutrition and exercise. Many students enjoy the

excellent El Centro College physical education facilities on a regular basis.

11. Many students experience the rewards of developing friendships with other individuals and enjoy developing feelings of trust for other human beings. El Centro College also has a club to foster awareness of the needs of handicapped persons.

12. Students benefit from exposure to the attitudes of respect, understanding and acceptance for oneself and others that is an essential part of the people working with the Texas Rehabilitation Commission - El Centro College Program. The faculty and staff at El Centro College serve as role models for students and encourage good personal grooming and good interpersonal relationships.

13. The flexible entry, flexible exit procedures enhance the students' opportunities to benefit from the self-paced approach to education.

14. Each student is valued for the person's individuality and discouraged from comparing himself with other students. At the same time, student success is a contagious part of the program.

15. Rehabilitation students from the University of Texas Health Science Center at Dallas have found the Vocational Rehabilitation program valuable training ground, and the students benefit from their additional attention.

16. Attending El Centro College has prestigious stimulus value for the rehabilitation student that has a positive lifetime effect on the individual's self image. Many students pridefully say "I'm the first member of my family to go to college."

17. Students are encouraged to use all El Centro College facilities and are encouraged to feel free to interact with Vocational Rehabilitation personnel whenever they wish.

18. A registered nurse is available to students at all times and an additional rehabilitation counselor who works exclusively with handicapped students is available to help with students who wish additional assistance.

19. The Vocational Rehabilitation Program has become a source of pride to administrators, faculty and staff at El Centro. Many persons not directly involved with the program give their interest and time to the Texas Rehabilitation Commission students. The following are examples of the positive attitudes toward handicapped students that are fostered at El Centro College:

a. Many faculty members give their personal books to our students so that they may have these reading materials for their own.

b. The students are able to benefit from the development of exercise programs formulated by El Centro's exercise physiologist.

c. Students from the nutrition department are available to work with Texas Rehabilitation Commission students on an individual basis to increase these students' awareness of the benefits of proper nutrition.

d. The nurses take a personal interest in Texas Rehabilitation students, making available some innoculations and laboratory tests free of charge.

e. The students have been given toothbrushes and instructions on good dental hygiene by a dental hygiene instructor at El Centro.

f. The students are benefited by exposure to many cultural activities at El Centro College.

g. Many physical changes have been made at El Centro in the past years that are indicative of El Centro's growing interest in accommodating the needs of handicapped students.

B. TEXAS REHABILITATION COMMISSION AGENCY'S ADVANTAGES

1. The Texas Rehabilitation Commission counselor has a training program that is available for entry and exit on a regular four week basis; this enables the counselor greater flexibility in creating the client's rehabilitation plan.

2. The Texas Rehabilitation Commission counselor is able to utilize the El Centro College Vocational Rehabilitation Program for both a pre-vocational and vocational training development site and for a screening device to determine if further expenditure is justifiable in relationship to their client's readiness.

3. The Texas Rehabilitation Commission counselor receives written evaluation progress reports every month. The Texas Rehabilitation Commission counselor is contacted by telephone or writing on a more frequent basis if student behavior warrants additional consideration. The faculty and staff who work with the Texas Rehabilitation Commission - El Centro Vocational Rehabilitation Program are very familiar with rehabilitation processes and procedures, and can give the Texas Rehabilitation Commission counselor excellent feedback concerning an individual client's needs.

4. The policy of the Texas Rehabilitation Commission - El Centro College Program is to consider the best way to meet the Texas Rehabilitation Commission counselor's and the Texas Rehabilitation Commission client's needs. Communication is open and counselor feedback and suggestions are welcomed. Counselors and El Centro Vocational Rehabilitation staff have enjoyed an excellent relationship to date involving frequent telephone and personal contacts.

5. Some Texas Rehabilitation Commission counselors use El Centro College facilities to meet with their clients on a regular basis in order to determine the client's progress. These counselors have found their visits to El Centro College both informative and effective in working with their clients.

6. Many Texas Rehabilitation Commission counselors indicate that their clients who have personal adjustment problems seem to progress more successfully at El Centro College than at other sites they have previously used due to the atmosphere of positive reinforcement and empathy.

7. The Texas Rehabilitation Commission counselor finds the utilization of the El Centro Vocational Rehabilitation Program an economic advantage.

8. The Texas Rehabilitation Commission counselors seem to respond positively to the program. This has been indicated by both personal comments and by the enrollment figures.

9. The program is flexible enough to be appropriate for use by persons with various disabilities; therefore, it is a program that can be used by clients from each Texas Rehabilitation Commission counselor's caseload. Each of the area Texas Rehabilitation Commission offices have referred and received services for its clients. During

the first six months of the 1980 - 1981 year, 35 counselors have referred clients.

10. The Original Innovation and Expansion Grant was written for three years with the stipulation that reapplication and evaluation must occur annually prior to optional refunding. Not only was the grant refunded each year, but it was also continued for three additional years. The program is now refined and well established and in its sixth year of operation.

11. The people who work with the El Centro Vocational Rehabilitation program are familiar with Dallas Community resources and are able to handle a variety of situations that my occur.

12. It is vital to the student's success that the efforts and the goals of the El Centro Vocational Rehabilitation Program and those in the client's Individual Written Rehabilitation Plan be coordinated. Cooperation and insight into the Texas Rehabilitation Commission counselor's point-of-view are essential for this to be accomplished. Working with the Texas Rehabilitation Commission counselor is an important part of the El Centro Vocational Rehabilitation Program.

13. The Texas Rehabilitation Commission Counselors are able to utilize the staff counselors of the Vocational Rehabilitation Program for individual counseling as

well as the testing center, career center, health center, recreation facilities, etc., of El Centro College free of charge for the benefit of their clients, thus providing a multitude of service for minimal cost. During the first six months of the 1980 - 1981 group requisition, the addition of counseling hours for two trained instructor/counselors provided 459 hours of counseling with students and gave 240 individuals the extra help they sought while enrolled in the Texas Rehabilitation Commission Vocational Rehabilitation program.

C. EL CENTRO COLLEGE ADVANTAGES.

1. The Texas Rehabilitation Commission - El Centro College Vocational Rehabilitation Program is assisting El Centro College in meeting the regulations of Section 504.

2. El Centro College has developed an innovative programming approach to meeting the needs of the handicapped population.

3. El Centro College has assisted in increasing a high level of employment and decreasing the tax burden for Dallas County.

4. El Centro College has provided an opportunity for a new way of life for all who enter.

5. The Texas Rehabilitation Commission - El Centro College Vocational Rehabilitation program has both

directly and indirectly influenced an increase in the handicapped population in the regular academic program for El Centro College and other colleges in the Dallas County Community College District.

6. The Texas Rehabilitation Commission - El Centro College Vocational Rehabilitation program is sponsored by the El Centro College Community Service program and has increased Community Service enrollment. In the first six months of the 1980 - 1981 group requisition, 1,590 community service classroom slots were filled by Texas Rehabilitation Commission clients.

7. El Centro College continues to fulfill its basic philosophy for the development of the Dallas County Community College District to provide service to meet the needs of the community in its entirety. This is evidenced by (1) various disability groups represented in the student population, and (2) the residences of the Vocational Rehabilitation students encompass all of Dallas County.

8. El Centro College is recognized by area persons who are concerned about handicapped individuals as an important community resource for handicapped individuals who are interested in developing and refining their skills for independent living.

9. Support of the El Centro College - Vocational Rehabilitation Program is a direct contribution to society

because the program has enabled many people to improve themselves enough that they are able to return Texas Rehabilitation Commission and El Centro College's investment in them by becoming functional working members of society. The Texas Rehabilitation Commission - El Centro College Vocational Rehabilitation Program makes economic sense because it affords people the chance to contribute to society through independence and work rather than draining society through dependency. The Texas Rehabilitation Commission - El Centro College Vocational Rehabilitation Program demonstrates a humanitarian concern for all people.

VII. ACCOMPLISHMENTS.

The El Centro College Vocational Rehabilitation Program began with an enrollment of 58 students during the first year. It has increased substantially from that time to the present. Comparisons of the last three year enrollments show:

COURSE	NUMBER OF STUDENT ENROLLMENTS 1978-1979	1979-1980	1980-1981
Human Development	283	333	238
Human Development Advanced	156	293	157
Developmental Math	342	611	708
Developmental Reading	330	579	621
Bookkeeping	157	240	203
Office Machines	129	248	254
Office Procedures	138	209	305
Typing	220	383	434
Total Classroom Slots:	1,755	2,896	2,920
Total Number Students:	256	373	408

The number of students has increased 59% over the past three years. Total classroom slots has increased 66% over the same period.

IMPLEMENTATION OF A RURAL MODEL OF VOCATIONAL SERVICE DELIVERY FOR HANDICAPPED ADOLESCENTS: A DEVELOPMENTAL PROCESS

by

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IMPLEMENTATION OF A RURAL MODEL OF VOCATIONAL SERVICE DELIVERY FOR HANDICAPPED ADOLESCENTS: A DEVELOPMENTAL PROCESS

Virginia J. Werbel
Irwin Ross

In September, 1980, Educational Service Unit (ESU) #9, Hastings, Nebraska, was awarded a three year Handicapped Children's Model Program (HCMP) Grant by the Office of Special Education. As a grant recipient ESU #9 was charged with the task of developing a rural model for the delivery of vocational services to handicapped (MR, LD and BI) students, 15.6 to 21 years of age. Now in its second year of operation, the model, entitled the Cooperative Vocational Program, is attempting to address the vocational needs of handicapped students who reside in and attend school programs in rural southcentral Nebraska.

The purpose of this report is to present a description of ESU #9's Cooperative Vocational Program. Particular attention will be given to the developmental process of implementing a centralized model of vocational service delivery which gradually evolved into an effective rural system of decentralized service delivery. Within this framework then the paper addresses four (4) topics. These include the following:

1) The rationale supporting initial implementation of a centralized model of vocational service delivery.
2) The variables of a rural setting which may influence and shape vocational program components and result in specific model changes.
3) The service delivery problems and difficulties which may be encountered in rural settings if a gradual shift away from a centralized model towards a decentralized delivery system does not occur.

4) The characteristics of a rural model of decentralized vocational service delivery.

Educational Service Unit #9: A Rural Service Provider

Operating as an intermediate education agency in Hastings, a rural community of 25,000, ESU #9 employs a field staff of 140 special education professionals to deliver services on a contractual basis to approximately 1080 handicapped children, ranging in age from 0 to 21 years of age. The students are enrolled in 38 small school districts with enrollments ranging from 6 to 3430 students. The schools, with the exception of Hastings, are found in communities with populations of 5,000 or less and are located throughout a 3,000 square mile area. Each of these schools is classified as "rural" according to the National Center for Educational Statistics: rural schools range in enrollment from 1 to 2,500 children and are located in geographical districts incorporating from less than 50 to 50,000 people.[1]

Eighteen of the 38 school districts served by ESU #9 operate secondary (grades 7-12) special education resource programs which serve approximately 300 verified handicapped adolescents, ages 11-21 years old. These resource programs are staffed by ESU #9 certificated resource teachers and support a philosophy of educating handicapped students in the least restrictive environment.

Historically as a rural service provider, ESU #9 has been challenged by "Nebraska ruralness" in its efforts to develop effective models of service delivery for handicapped students. Descriptors commonly used by the staff at ESU #9 to describe the environment in which they live and work serve to emphasize the problems of service delivery found in many rural areas; "large geographical service areas, small school districts, resistance to change or intervention, and a widely scattered handicapped population." The ruralness problems experienced by ESU #9 are similar to the difficulties encountered by other rural education agencies. Data collected during Phase I of the National Rural Research and Personnel Preparation Project (1978-79) revealed that environmental and socio-economic variables characteristic of ruralness interfered with the efforts of 38% of the nation's state education agencies to implement P.L. 94-142 in rural schools. State officials reported most difficulty in three categories: (1) staffing problems, (2) attitudinal variables, and (3) problems based on rural geography.[2]

The Cooperative Vocational Program: A Centralized Model

During year one of project development the Cooperative Vocational Program functioned as a centralized model of vocational service delivery. Rationale supporting the initial implementation of a centralized delivery system illustrates the developmental process which occurs with the introduction of a model program into a rural setting. A centralized model assured that a specific set of program development needs could be met. These included:

1) The need to initiate service development and delivery with a qualified well trained core staff of project personnel.
2) The need to create, among those immediately responsible for planning and carrying out individual education programs for the target population (i.e. superintendents, principals, SPED personnel) an awareness of the handicapped adolescents'

need for vocational services.

3) The need to establish a positive attitude at the local school and community level, towards the development of vocational services for handicapped students.

4) The need to demonstrate effective service delivery and outcomes within a representative sample of the total target population.

5) The need to coordinate and plan with area vocational agencies working agreements so to insure an interagency approach to the delivery of vocational services while avoiding duplication of services.

6) The need to establish contact and communication with key community employers, throughout the service unit area, in order to facilitate community wide employer acceptance of the handicapped worker as project services are implemented.

By using a centralized model then, the project staff was able to lay the groundwork for program acceptance at the local school district and community level. Also important was the period of trial and error, experimentation, and modification allowed by the centralized model as the staff worked to develop the individual program components.

The centralized service delivery system was characterized by five (5) distinct program components. These components, common to many vocational and work-study programs for handicapped students, included:

1) Student Identification and Referral
2) Vocational Evaluation
3) Vocational-Individual Education Program

4) Job Exploration, Training and Follow-Up

5) Project Evaluation

The program components provided a starting point for model development. They were logical in sequence and appropriate to the project's goals and objectives. The components provided a structure for the development of service delivery procedures and activities. They lent direction to the projects staff's work.

As the project staff planned and developed the content of each program component, i.e. student referral and intake forms and procedures, a vocational evaluation instrument, etc., they anticipated a year-long process of model change and modification. The staff's awareness of this developmental process was based upon their acknowledgement of the significant impact which ruralness could have on the program model and the individual service delivery components. Although unable to totally predict this "ruralness impact" upon the centralized model of vocational service delivery the project staff were alert to a specific group of ruralness characteristics of variables which they anticipated might cause a gradual shift away from a centralized to a decentralized service delivery system.

The ruralness characteristics which the project staff felt could influence and even shape the service delivery model are common to many rural settings. These characteristics may be categorized into three major areas: 1) geographical conditions, 2) community variables and 3) school management practices. The ruralness characteristics include:

1) Geographical Conditions

   a) long driving distances between schools

   b) inclement weather during the winter months

   c) a widely scattered special education population due to sparse community populations and school district boundaries.

2) Community Variables
   a) sparsely populated communities
   b) lack or diversity in prime manufacturing
   c) community economies based upon agriculture
   d) limited number of entry-level job positions
   e) employer resistance to "outsiders"

3) School Management Practices
   a) a tradition of individual school autonomy and resistance to outside intervention
   b) board policies and procedures which recognize and reward student academic skill and accomplishment
   c) a limited awareness of the handicapped students' need to develop vocational skills
   d) teacher isolation and lack of involvement or program ownership

Ruralness did have a significant impact and influence upon the Cooperative Vocational Program. Because of the complexity of the ruralness concept and the interrelationships between the variables found in rural settings the affect of ruralness was not immediately clear to the project staff. Ruralness could not be addressed as an isolated group of factors affecting program development. Rather it was the results of a mid-year staff evaluation and analysis of progress in model development that revealed a number of potential service delivery difficulties and problems which were direct by-products or spin-offs of the implementation of a centralized service delivery model in rural settings. The discovery of these potential problem areas precipitated the need for a gradual shift away from a centralized model to a more decentralized system of of service delivery. The service delivery problems and difficulties which the project staff would have encountered had they not allowed the shift toward a decentralized model to occur included:

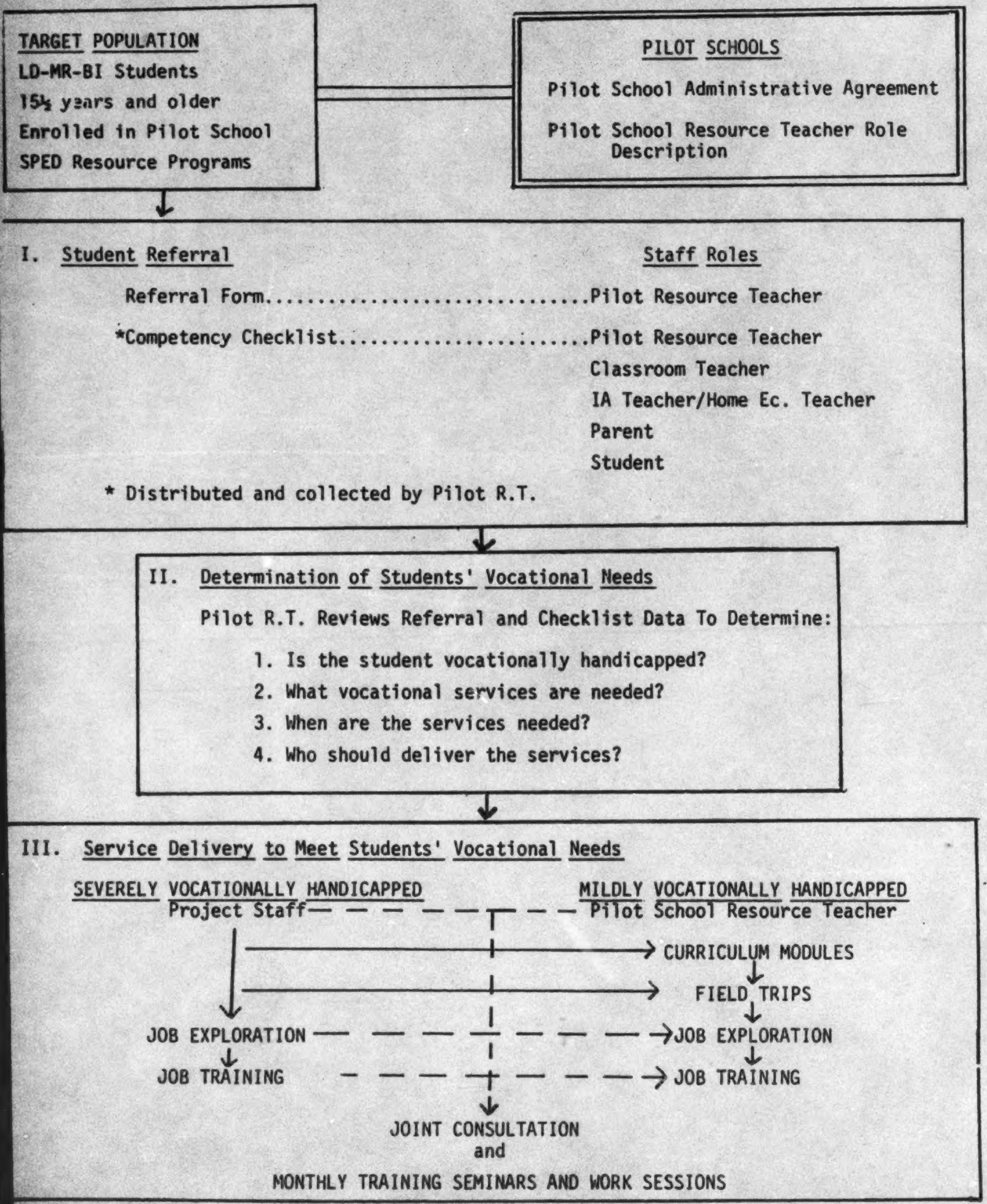
1) A lack of staff, time and budget resources to effectively delivery vocational services to a widely scattered target population.
2) An inability to increase the secondary resource teacher's involvement in the delivery of services because of a lack of program ownership and administrative commitment at the local school level.
3) Anticipated budgetary cutbacks that would necessitate reduction in project staff.

By recognizing these problem areas then the project staff were able to utilize information and experience gained from the first year process of program development to formulate a unique rural vocational model. A model characterized by a group of variables identified by the staff as crucial to the effective implementation of a decentralized rural plan for the delivery of vocational services to handicapped adolescents.

The Cooperative Vocational Program: A Decentralized Model

Figure 1 provides an outline of the second year program model. The model shows a significant reduction in the size of the program's target population, a simplified student referral and evaluation process, and a new emphasis upon the role of the secondary resource teacher in initiating and carrying out a defined continuum of vocational services and activities at the local school level.

COOPERATIVE VOCATIONAL PROGRAM
PROJECT MODEL



TARGET POPULATION
LD-MR-BI Students
15½ years and older
Enrolled in Pilot School
SPED Resource Programs

PILOT SCHOOLS
Pilot School Administrative Agreement
Pilot School Resource Teacher Role Description

I. **Student Referral** — **Staff Roles**

Referral Form..............................Pilot Resource Teacher

*Competency Checklist.........................Pilot Resource Teacher
Classroom Teacher
IA Teacher/Home Ec. Teacher
Parent
Student

* Distributed and collected by Pilot R.T.

II. **Determination of Students' Vocational Needs**

Pilot R.T. Reviews Referral and Checklist Data To Determine:

1. Is the student vocationally handicapped?
2. What vocational services are needed?
3. When are the services needed?
4. Who should deliver the services?

III. **Service Delivery to Meet Students' Vocational Needs**

SEVERELY VOCATIONALLY HANDICAPPED
Project Staff
MILDLY VOCATIONALLY HANDICAPPED
Pilot School Resource Teacher
CURRICULUM MODULES
FIELD TRIPS
JOB EXPLORATION
JOB TRAINING
JOB EXPLORATION
JOB TRAINING
JOINT CONSULTATION
and
MONTHLY TRAINING SEMINARS AND WORK SESSIONS

Figure 1

In September, 1981 the project staff invited seven (7) school districts and ten (10) secondary special education resource teachers to participate in the Cooperative Vocational Program as "pilot" schools and teachers. Criteria for the selection of these schools and teachers included such factors as the school district's "ruralness", i.e. community size, school enrollment, geographical location, etc., the administrators' and resource teachers' interest in providing vocational services as a part of their resource programs, the resource teachers' involvement in the school community, etc. Each of the schools and teachers invited to participate in the program accepted.

The selection of pilot schools and the pilot resource teachers represented an important step or prerequisite to the process of implementing a decentralized program model. Accomplishment of this prerequisite enabled the staff to:

1) Clearly define both the characteristics and the size of the target population.
2) Secure, through the use of a written "Administrative Agreement", assurance from individual school districts of their support for the model concept and their endorsement of the resource teachers' role in the delivery of vocational services to handicapped adolescents.
3) Identify and define the skills, duties, and responsibilities of the pilot school resource teacher as a direct service provider at the local district level.
4) Identify the characteristics of the role change process which the secondary resource teacher would need to experience in shifting from a tutorial role model to a vocational service

delivery model and most importantly, the training and assistance each teacher would require to successfully change his/her role.

5) Redefine project staff members' role in training and equipping the pilot school resource teachers with the skills and tools each would need in order to effectively deliver vocational services to handicapped adolescents.

6) Establish a greater degree of program ownership at the local school district level.

7) Reduce the projected financial costs involved in implementing the model because of the utilization of a staff of skilled professionals already in place at each of the selected service delivery sites.

Decentralization of the Cooperative Vocational Program's services and activities has been occuring since the beginning of the 1981-82 school year. Although it is too early to evaluate the effectiveness of the model it is interesting to note the nature of the program accomplishments to date. They reflect a strong commitment by both the project staff and the pilot school resource teachers to the concept of a decentralization of service delivery in rural settings. Examples of program accomplishments include:

1) An extensive survey of rural community employers which yielded valuable feedback concerning desired skills and behaviors for entry-level employees.

2) A Student Competency Checklist incorporating a prioritized sequence of desired employee skills and behaviors. Used in lieu of a sophisticated vocational evaluation system the

Checklist provides the resource teacher with an informal tool for compiling a profile of the handicapped students' vocational needs.

3) A series of fourteen (14) vocational curriculum modules, produced and written by the pilot school resource teachers, and based upon skill and behavior priorities identified by local employers.

4) A pilot resource teacher training plan wherein the project staff work with each teacher on a consultative basis and conduct monthly seminar/training sessions for the teachers.

5) A continuum of vocational services and activities which can be implemented by the pilot resource teacher and adapted to school/community characteristics and students' needs.

Summary and Conclusions

The implementation of a rural model of vocational service delivery for handicapped adolescents occurs as a developmental process. Designed first to function as a centralized plan of service delivery the model is shaped and modified by a number of significant variables. Examples include the characteristics of the rural setting, the skills and abilities of the staff, availability of budgetary resources, and the characteristics and needs of the target population. As these variables impact upon the model a unique decentralized service delivery system evolves which can successfully be introduced into the rural community and school district setting.

Although the Cooperative Vocational Program model has not yet undergone a a comprehensive evaluation several initial and tentative conclusions may be drawn concerning the effectiveness of a decentralized model of vocational service delivery in meeting the vocational needs of handicapped adolescents in rural settings. These include:

1) A decentralized model encourages program ownership at the local school district level while fostering administrative support and commitment for the program's goals.
2) A decentralized model may be economically affordable to the small, rural school district.
3) A decentralized model offers a program structure suitable to the rural environment and its unique characteristics.
4) A decentralized model removes the schools' dependency upon the core project staff for service delivery and instead actively involves the secondary resource teacher in planning and implementing vocational activities for handicapped adolescents.
5) A decentralized model affords closer attention to the unique needs of the handicapped adolescent as program services are individualized by each resource teacher and at each school site.

REFERENCES

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